

# CAR CRAFT

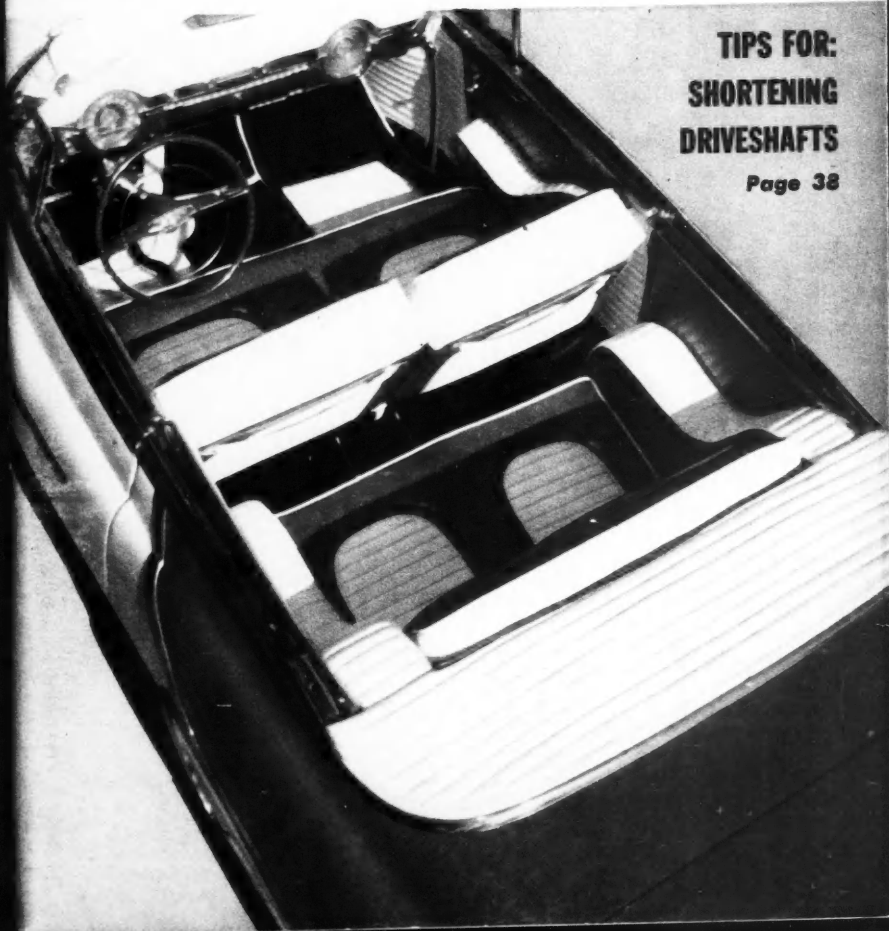
SEPTEMBER 1955 25c

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**TIPS FOR:  
SHORTENING  
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*Page 38*



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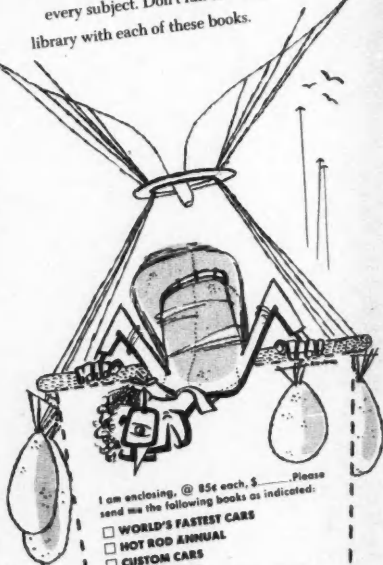
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# How I foxed the Navy

by Arthur Godfrey

The Navy almost scuttled me. I shudder to think of it. My crazy career could have ended right then and there.

To be scuttled by the Navy you've either got to do something wrong or neglect to do something right. They've got you both ways. For my part, I neglected to finish high school.

Ordinarily, a man can get along without a high school diploma. Plenty of men have. But not in the Navy. At least not in the U. S. Navy Materiel School at Bellevue, D. C., back in 1929. In those days a bluejacket had to have a mind like Einstein's. And I didn't.

"Godfrey," said the lieutenant a few days after I'd checked in, "either you learn mathematics and learn it fast or out you go. I'll give you six weeks." This, I figured, was it. For a guy who had to take off his shoes to count



above ten, it was an impossible assignment.

I was ready to turn in my bell-bottoms. But an ad in a magazine stopped me. Here, it said, is your chance to get special training in almost any subject—mathematics included. I hopped on it. Within a week I was enrolled with the International Correspondence Schools studying algebra, geometry and trig for all I was worth.

Came week-end liberty, I studied. Came a holiday, I studied. Came the end of the six weeks, I was top man in the class. Within six weeks I had mastered two years of high school math, thanks to the training I'd gotten.

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# BENCH RACIN'

with Racer Brown

SINCE OUR "Bench Racin'" session on engine tuning in the June '55 CCM, several interested parties wrote in asking for carburetion tuning tips, without the modern conveniences of mixture analyzers, dynamometers, etc. This is a bit more difficult and time consuming, but satisfactory results can nearly always be obtained with a little care and patience.

Assuming that the engine is fairly "fresh" and the spark plug type and ignition timing are correct, we will start juggling jets in the interests of maximum performance. Obviously it's a great advantage to know how a carburetor operates and the carburetor (or plural of same) in question must be clean, in generally good condition and the float or fuel level set according to specifications. If two or more carburetors are to be used, it is essential that they be identical in model and type and the fuel or float levels be the same. When little or nothing is known about the engine-carburetor combination, it's best to use stock jets all the way through to start with.

After installing the carburetor(s), the most immediate problem is to get the engine to idle, so we set the idle speed adjustment first then play with the idle mixture screws. In two- or four-throat carburetors or in multiple installations, the idle mixture screws should not be separated by more than  $\frac{1}{8}$  to  $\frac{1}{4}$  of a turn. Unbeknownst to most amateur mechanics, the idle system, when a single carburetor is used, supplies all of the fuel to the engine up to about 30 mph and part of the fuel up to about 45 mph. In multiple installations, this may extend to 60 mph. As a consequence, the idle mixture must be adjusted to suit the demands of the engine at low speeds and not necessarily for the best and smoothest idle, as one may suspect. In most modern carburetors, this high vacuum-low fuel flow range is a very critical one indeed, so it will pay dividends to make sure that the throttle valves are properly seated with a uniform air gap between the valves and the throttle bores when

(Continued on page 66)

# CAR CRAFT

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## cover

Bill Gaylord's orange and white interior is a shining example of what can be done with today's new upholstery materials and clever color designing. A new how-to-do-it interior series can be found on pages 16-21.

Ektachrome by Tom Madley

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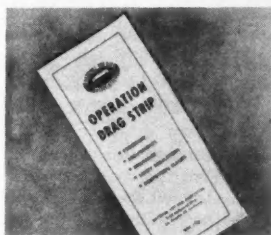
## Words From The Editor

WHEN FALL BEGINS to roll around most car owners and enthusiasts usually start giving thought to what they plan on doing to their cars through the long winter months. For the past six months, we here at CAR CRAFT have been pushing short how-to-do-it features, for both hot rods and customs, strictly for you to take advantage of during this so-called dormant period. We don't mean to say that now that fall is here we are securing this type of feature—not at all, in fact, the do-it-yourself kick will be pushed more than ever. In this month's issue, for instance, we have started a brand new series on doing your own upholstery. It's not the difficult rolled and pleated theme, but rather a simple approach to a good looking interior utilizing some of the latest upholstery material now on the market. The complete series will take you the full route—door panels, seats, headliner and then custom-made floor rugs.

Other top how-to-do-it articles scheduled for the fall and winter months are: *Working with Fiberglas*; this will cover every phase of Fiberglas body making, from the basic molds right up to the finished body. *Customizing the Chevrolet*, a complete step-by-step customizing feature similar to the *Building a Custom* series, which concludes with this issue. Tech editor Ray Brock has several terrific articles for the near future, mainly a step-by-step procedure of adapting hydraulic brakes to the early A-bones. Others include basic hopping up features for the late V8

engines and short speed secret tips on various equipment, such as he has presented in the past months. All in all, the forthcoming issues of CAR CRAFT look like they will be the biggest yet, and that's the way we like it—hope you do too!

We would like to change the pace a little right here and fill you in on one of the most useful pieces of literature that we have had the chance to read through for some time. National Hot Rod Association has just finished a fifteen page booklet called "Operation Drag Strip." It's the most complete instruction



manual for those of you who are interested in how to go about procuring a drag strip, or those of you who are looking for the correct info on staging a drag meet. The booklet gives you the breakdown on NHRA's Sanction Procedure, Requirements, Insurance Program, Safety Regulations and Classes of Competition. The booklet is free of charge and can be obtained by writing to National Hot Rod Association, 5959 Hollywood Blvd., Los Angeles 28, California.

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## LETTERS

### THE FAMILY JEWEL

Dear Sirs:

Enclosed please find a photo of my husband's custom. We would both be pleased to see it in your magazine, as it is practically our family Bible.

Our '50 Ford is shaved and decked with 3-inch extended '49 Pontiac taillights; grille is '51 Merc with every other bar taken out; '51 Ford top grille bar and '51 hood; '51 Merc parking lights and extensions. The present mill is a '51 Ford Six, also slightly modified with milled head, split manifold, Merc carburetor, alcohol injector, hot ignition and more than I don't know enough about to explain. We are starting to customize the interior now, having just two-toned the outside Malibu Blue and Sahara Sand, the latter being on top and extending down the sides to the taillight crease and then back. This doesn't show in the photo, since the two colors are close to the same depth.

This is the fifth time this car has undergone the custom treatment since we've had it. My husband, Bud, is in the Air Force and we are living in Mississippi, but we are from New Jersey originally.



Oh, yes! We have a rod half finished, too! It's a '32 Plymouth, 3-window coupe, which is chopped 6 inches and channeled 8

inches. We are going to mount it on a late model chassis soon, rather than modify the original. Even our scooter, which Bud uses for transportation to and from the base, has duals and a flame-red paint job.

Thanks again for a swell magazine. They're well thumbed around here.

Mrs. John J. Gill, Jr.  
Biloxi, Miss.

### OUR SONG AGAIN!

Dear Sirs:

In reading your newest do-it-yourself series, I, too, have been doing-it-myself down



here in the land of the squirrel tails, mud flaps, and "Ya'll Come" signs.

Enclosed you'll find pictures of the taillights on my '50 Ford semi-custom. They're semi-frenched lights that took some two hours' work to complete at Mac's Custom Body Shop here in town where I'm doing the work. I thought some of the readers might be interested, so—work was done as follows:

- 1) From sheet metal, hand form the "lip," rolling an edge on it, and weld the lip to the top edge of the light opening.

- 2) After grinding and filing the weld, a small amount of lead was used to cover and finish the job.

3) File lead, metal prep, spray on primer, block sand, feather edge surface with No. 220 wet or dry sandpaper. And, there you have it!

Your magazine is tops around the shop and is known as "Mac's Bible," and is looked to each month with eagerness. Much information given in your publication inspires many of the ideas of our customers.

Respectfully yours,  
Richard Sawitskas  
Mac's Custom Body Shop  
Fayetteville, North Carolina

*Thanks very much, Dick, for your fine letter. Here's proof that doing it yourself saves money, plus being a lot of fun.—Ed.*

WHO SAID SNOW AND CUSTOMS DON'T MIX?  
Dear Sirs:

Enclosed are a few pictures of my '47 Ford convertible. The hood, deck and fenders have been dechromed and filled. A custom grille has been installed, while the headlights have been frenched. The doors are electric and the trunk has a vacuum lift. Stock taillights were removed and '40 Chevy taillights installed, while the gas filler was put in the trunk.

The car is painted Gulf Blue and has blue and white leather upholstery. The dash is chrome plated while the floors are covered with blue rugs.

The engine is a '48 Merc with the only addition being headers. This spring I intend



to add a white padded top and a '52 Olds power plant.

Thank you,  
Jerry Tessman  
St. Paul, Minn.

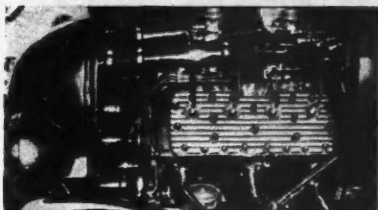
*We have some customs like yours coming up in the near future, Jerry, and also a "Grab Bag" or two devoted to ideas for this year and model. Thanks again.—Ed.*

SEPTEMBER 1955



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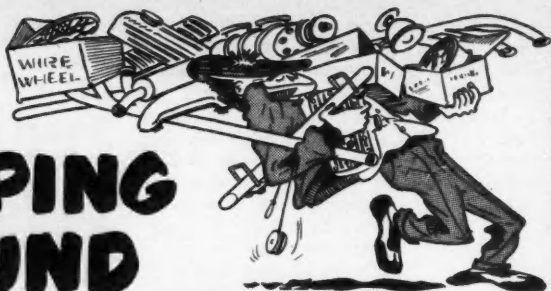
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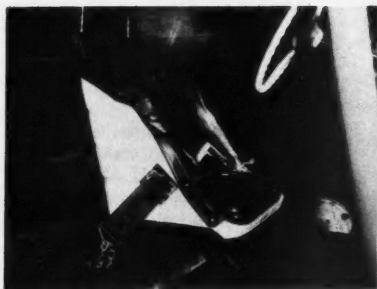


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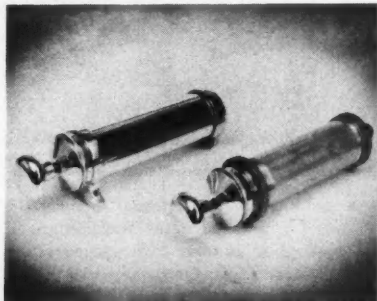
At last, the problem of hanging clothing garments in a car without wrinkling has been solved. It's a new hanger that can be easily placed into use when needed, or stored away in the glove compartment. It is adjustable to any area between the top of the rear seat and the upper rear window's trim molding. Driver's view remains unobstructed. Price is \$1.49. Write: Walters Intra National, 1036 N. Dearborn St., Chicago, Illinois.



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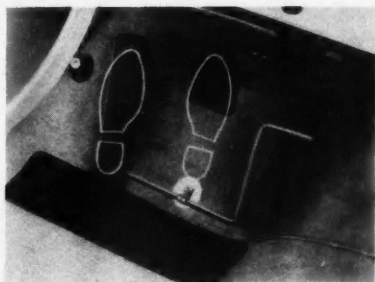
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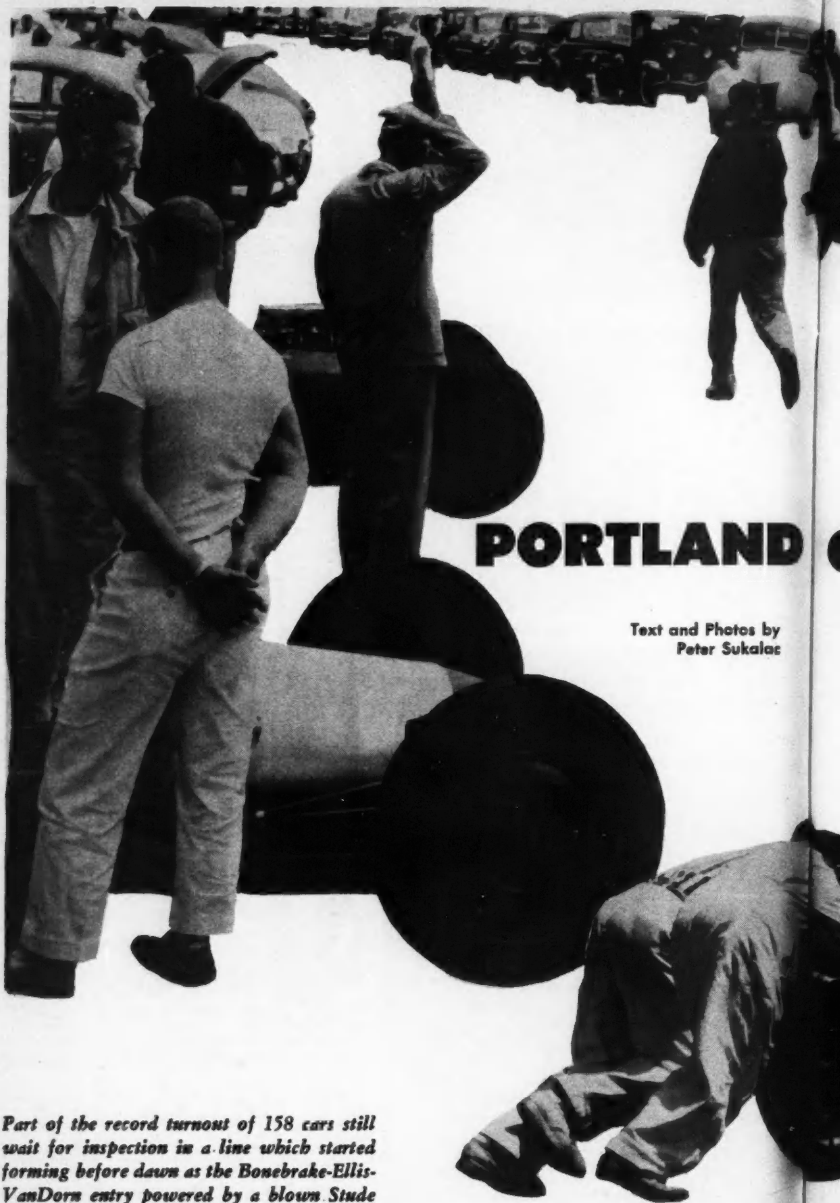
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Address \_\_\_\_\_  
City \_\_\_\_\_ State \_\_\_\_\_

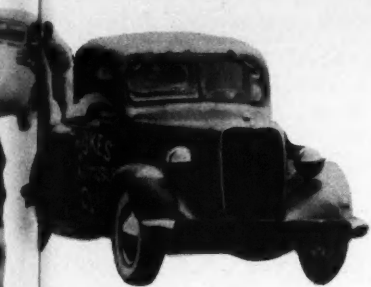


## PORTLAND

Text and Photos by  
Peter Sukalas

*Part of the record turnout of 158 cars still wait for inspection in a line which started forming before dawn as the Bonebrake-Ellis-VanDorn entry powered by a blown Stude gets pushed out to starting line for a run.*





N.H.R.A. DRAG SAFARI  
DISCOVERS A REAL GANG  
OF HUSTLIN' CARS UP IN  
THE TALL PINE COUNTRY  
AT THE . . .

## CHAMPIONSHIP DRAGS

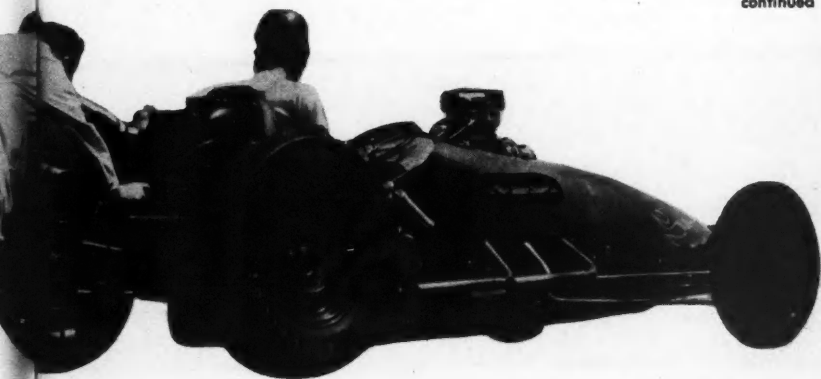
THE MONTHS OF careful planning laid down by the Columbia Timing Association of Portland, Oregon, came to a fitting climax when the Northwest Regional Drag Championships were held at Scappoose, Oregon on June 12, 1955.

A well organized public relations tour of high public officers by the members of the

National Hot Rod Association's Drag Safari resulted in a far greater turnout of spectators than was expected on race day.

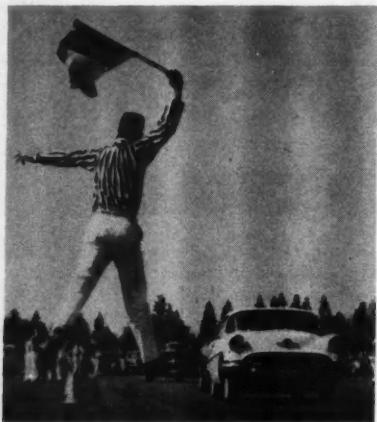
Entries from Oregon and Washington were lined up at the gate before dawn waiting to be given the official NHRA scrutiny and classification. Normally run under the Cascade Conference rules, the new system at first caused

continued





*Merc-powered dragster at left is Blanchard-Eayers entry. Here, car is ready to eliminate a rival as it sets fast time. Car was top eliminator, team won neatest crew trophy.*



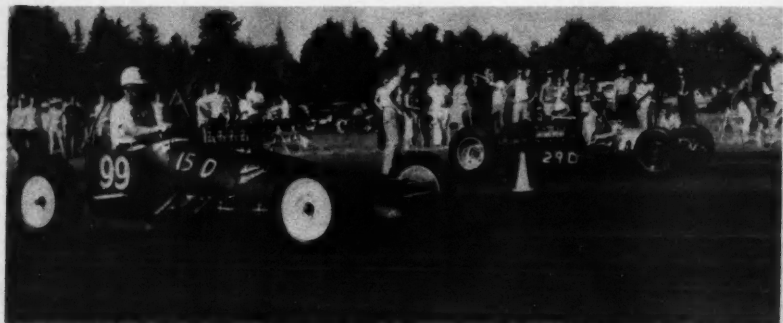
*Starter Gary Klaus flags off blown '55 Olds which took cup in modified stocker class.*

some confusion among the entrants, but before the day was through all was well.

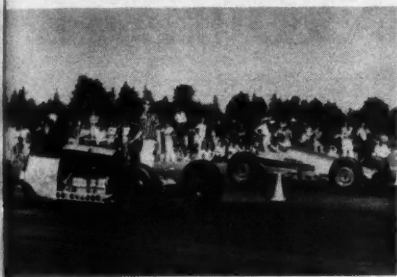
New machines that had not been seen before appeared in droves. This was especially true in the dragster class. Unfortunately, it takes time to get the bugs out of any rig and this fact was "pounded home" to the dismay of many of the crews of the new cars.

From the earliest moments of the foggy dawn it was evident that the highlights of the day would be supplied by the Ardun-Merc rail of Don Fancher of Gresham, holder of the Oregon record of 134 mph, and the Merc-powered "hot dog" of Chuck Blanchard and Bob Eayers. First one car would time in and then the other until Bob Eayers flogged the clocks for a neat 135.54. Fancher failed to better this time.

Late in the day, when eliminations were run off, the Blanchard-Eayers machine again outperformed the Fancher rail.



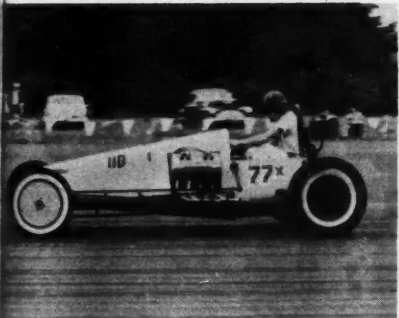
*Although both of these cars had Merc engines, rear engined job of Monty Rowland had the edge on traction, narrowly nosed out Smith dragster that looks like a vacuum cleaner.*



*Record number of dragsters appeared for Portland meet. One on left ran '40 Chev mill.*



*Safari photographer Rick Rickman records run of two hot roadsters for NHRA film.*



*Don Fancher had speed of 134 with Ardun-Merc but lost to Blanchard-Eayers entry.*

## CLASS WINNERS

CLASS	ENTRY	TIME	BODY & ENGINE
A/S	Bill VanDouris Spokane, Wash.	76.33	'55 Chev.
B/S	Bob Mantz Portland, Ore.	76.72	'53 Lincoln
C/S	Pierre Phillips Portland, Ore.	67.41	'53 Stude.
D/S	Herman Miller Vancouver, Wash.	69.61	'41 Merc.
A/G	Lewis Waldenberg Portland, Ore.	N.T.	'32 Ford-Cad.
B/G	Wayne Mahafay Salem, Ore.	76.72	'32 Ford-Merc.
C/G	John Feicht Portland, Ore.	86.45	'55 Olds blown
D/G	Dick Maris Portland, Ore.	67.61	'48 Cad.-'53 Cad.
A/A	Wardin Bros. Portland, Ore.	103.23	'32 Ford-Cad.
B/A	Roger Simonatti Portland, Ore.	92.87	'40 Ford-Merc.
E/SR	Gary Richardson Seattle, Wash.	81.08	'31 Ford-Merc.
C/SR	Leitoff-Gannon Portland, Ore.	75.00	'37 Ford-'48 Merc.
A/R	Reuben Schanaman Portland, Ore.	101.35	'27 T-Cad.
B/R	Jim Martin Seaview, Wash.	91.60	'32 Ford- '53 Ford 6
O/G	Bonebrake-Ellis- VanDorn Portland, Ore.	115.00	dragster-'52 Stude blown
B/F	Don Porter Salem, Ore.	98.60	'35 Ford-Merc.
C/F	Rex DeLong Portland, Ore.	91.65	'52 Ford-Merc.
A/C	Clark Marshall Seattle, Wash.	110.70	Bantam-Merc.
B/C	Steve Pick Spokane, Wash.	102.00	'32 Ford-Merc.
C/C	Morris Walters Longview, Wash.	94.43	'32 Ford- '51 Stude.
A/M	Clarence Fish Monsano, Wash.	112.96	'25 T-Merc.
B/M	George Erickson Portland, Ore.	112.07	'27 T-Merc.
D	Blanchard & Eayrs Portland, Ore.	135.54	Dragster-Merc.
Spts	Chuck Frost Portland, Ore.	90.90	'55 T-bird blown
Spts	Tom DeLon Portland, Ore.	87.64	'53 Jaguar

Fast time of the day—Blanchard & Eayrs—135.54

Top eliminator—Blanchard & Eayrs—132.15

Cars entered—158

Cycles entered—10

Attendance estimated—3,000

# NEOPHYTE



*Dorricott's club coupe is a good example of why the '49-'51 models are proving a favorite with the younger set. Car needs only small amount of work to become quite a showpiece and a teenager's pride and joy.*

*The rear portion of the '50 Ford has had identical bumper treatment as that of the front. Taillights are very original with their small hand-made aluminum housings and Buick bubble type lenses deeply recessed.*



# KNOCKOUT

## A HOT SPOT FOR CUSTOMS AND HOT RODS—BAY AREA NOVICE SHOWS LOCAL TALENT LATEST ROUTE

**I**F YOU should single out a group of custom car owners and asked each one what his basic motive for building his particular car was, you'd more than likely get a ninety per cent answer of—"just to be different from the next guy."

Young Bob Dorricott, who hails from Oakland, California, is no different from the rest of us. He became dissatisfied driving his stock appearing '50 Ford to club meetings and after club activities and decided that a few modifications would put him in the cus-

*Grille styling was accomplished by utilizing grille assembly from Canadian Ford Meteor. Front bumpers emanate from '55 Pontiac. Center of gravel pan has rolled edge. Hood has been nosed and headlights frenched by merely using the stock rims.*

tom bracket and also give something he could be proud of.

He turned the car over to one of the top custom shops in the bay area, Gordon Vann's Body Shop, and within a period of three months the car emerged from the front portals a new breed. The highlights of the body modifications were the grille, taillights and bumper treatment. A Canadian Meteor grille assembly was installed in the stock Ford's grille opening. Unique taillight housings were hand-made from aluminum. Late Buick lenses were recessed far back into the small aluminum fairings. The novel bumper treatment consisted of '55 Pontiac split front bumpers installed both on the rear and the front. The old gag saying of *you shall have music* holds true due to the neat installation of a small forty-five rpm record player which Bob incorporated into the glove compartment.

Now when the weekly club meetings roll around and the local bench racing session rears its ugly head, Bob no longer stands on the outside of the huddle looking in. He merely slides up a chair, assumes his position and plays the part of—*just one of the boys!*



M and R Photos

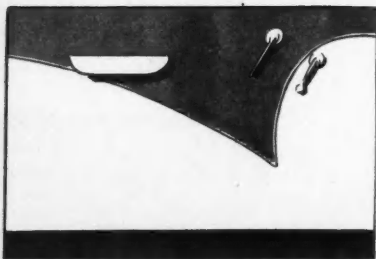
## INTERIOR IDEAS

FRESH IDEAS COMBINED WITH THE LATEST  
NEW BRUSH-ON PLASTIC PRODUCTS

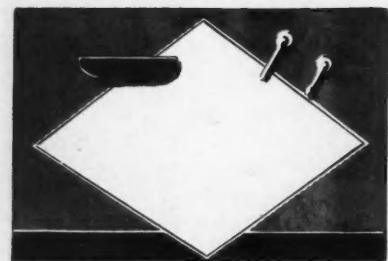
**B**ACK IN JANUARY of this year, we featured a series of articles on how to upholster your own car in the traditional rolled and pleated fashion. The series met with excellent response. Since that time another approach has taken place. Instead of the costly rolls and pleats, many custom and hot rod enthusiasts are coming up with simple, colorful and cleverly designed interiors that are just as much point getters as

the elaborately pleated plush buckets. This is largely due to newly designed upholstery materials recently released for public market and their wide variety of pastel colors that can be used for attractive two-tone purposes.

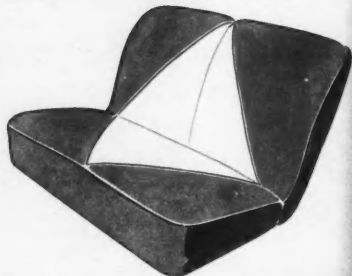
The following six pages are devoted to this latest upholstery trend and a new product used for rejuvenating old interiors. The illustrations found on these two pages are suggestive designs by three top custom upholstery shops in the country: Jack MacNeill's Top Shop, Gaylord's Upholstery Shop, both located in Los Angeles, and Scotty's Top Shop, San Diego, California.



*Interior designs can derive from exterior styling such as this sweeping two-tone pattern for seats and door panels simulating Buick's popular long spear-type side trim.*

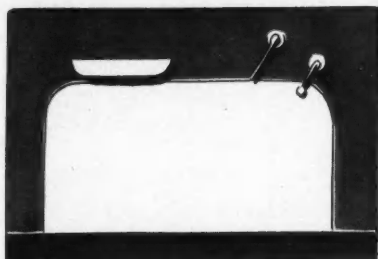


*Diamond-shape design has been very popular for interiors in the past. The diamond shape is such that it can be incorporated into seats, door panels and the headliner.*

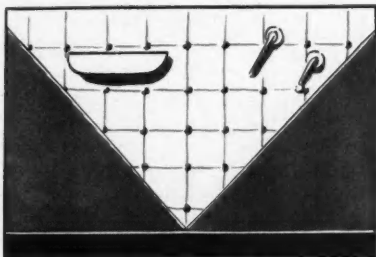




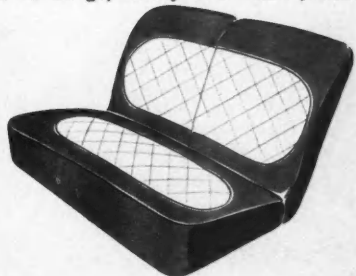
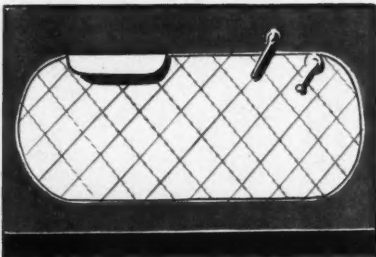
# UPHOLSTERY MATERIALS—FANTASTIC COLORS— LEND A NEW LOOK FOR PLUSH INTERIORS



*The horseshoe design is possibly used more than any other interior pattern. It can be carried through from seat to seat, or divided down the middle as it is shown here.*



*Another type diamond design is this pie-shaped pattern combined with button tufted center sections. Buttons are used for variation in design, mostly with cloth fabrics.*



*Oval center sections make attractive design, especially with two-tone colors. Oval sections are padded with extra layer of foam rubber, then sewn for diamond pattern.*

SPECIAL  
INTERIOR SECTION

# PAINT-ON PLASTIC



Materials needed for rejuvenating your interior are plastic coating, brush and tape.



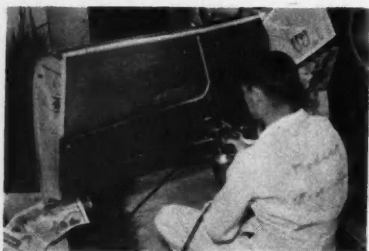
1. First make "spot check." Leather material will not dry on plastic and vice versa.



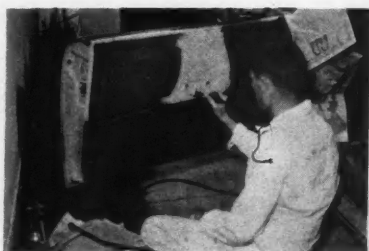
3. The surface to be painted is now thoroughly washed down with soap and water.



4. If two tone is desired, mask off dividing area. Also mask off all unremoved trim.

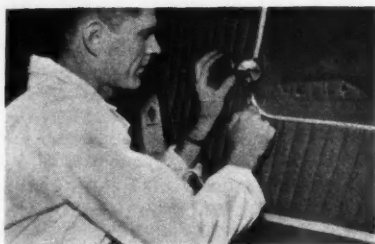


6. Large areas can be completed faster with spray gun. Brush can be used to touch up.



7. Bone white is now applied to door panel with brush for matching two tone color.

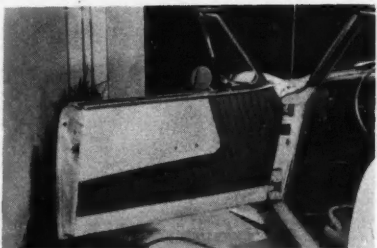
## PRODUCT FOR INTERIORS



2. Next step is to remove all possible trim and hardware. Saves time when cleaning up.



5. Seats can be easily removed for painting. For headliner and inner panels use brush.



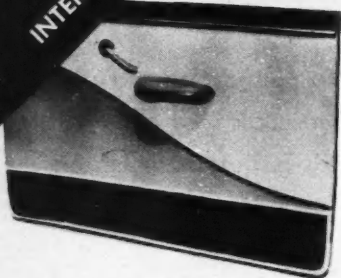
8. Here is finished item. Drying time is twenty minutes. Trim can now be replaced.

### Worn and Faded Upholstery Can Look Like New with This Fabulous Brush-on Plastic Liquid

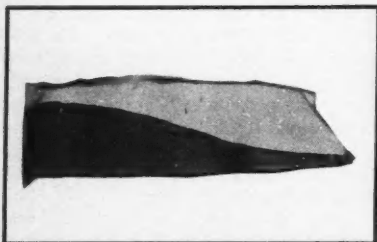
FOR OUR special interior issue this month we feel fortunate in presenting to you an exclusive report on a new sensational plastic product, soon to be scheduled for the commercial automotive market, for renewing upholstery. The new product is called Mode-Lac, and is made from the new and durable vinyl type plastic. Its greatest asset is the method of application. It can be applied either by spray gun or brush and has a rapid drying time of twenty minutes. It is basically designed for interiors that have faded and worn to discoloration, or for those who just wish to alter the color scheme of their car's interior. The liquid is manufactured in a variety of basic colors with special color tints being made up upon request. To prove its durability the editorial staff did everything possible to mar its finish, but to no avail. Sandpaper was used trying to destroy the finished surface, and only after severe sanding did original upholstery show through. This is due to the terrific impregnation factor of the vinyl plastic base. The coating material is made up in two special types, one is for leather and another for plastics. A quart of material is sufficient for a complete interior and sells for \$3.90. Inquiries should be directed to: Modeen Products Company, 3201 Venice Blvd., Los Angeles, California.

## DOOR PANELS

## PART I



*(We wish to thank Scott's Top Shop, San Diego, California, for the following photos.)*



1. Cut and layout material needed. Bottom section is scuff pad made from rug material. Allow 1-in. excess material for edges, seam.



2. After sections have been cut, sew them together using diagram B. For stitching methods, check top of the opposite page.



3. Enough material is sewn on to the outer edges of the scuff pad for wrapping around panel. Also a 2-inch strip for seaming.



4. Scuff pad is now sewn to top panel section. First stitch rug's edge, using diagram A, then lap upper section and sew together.

## Simple Two-tone Custom Interiors Make Their Bid for the Latest Fad

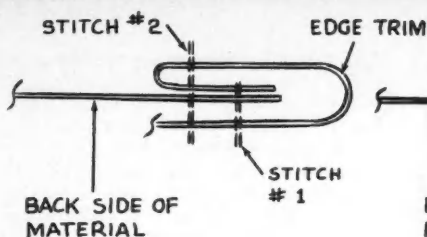


DIAGRAM A

*This stitch is used for trimming edges. It's a double stitch, but only one stitch is visible. Top edge of rug is trimmed with this method, then rug is lapped over the upper section and both sewn together.*

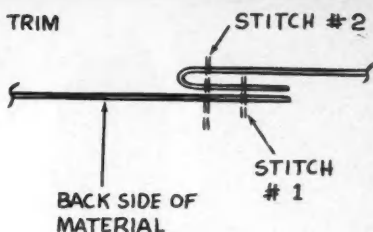
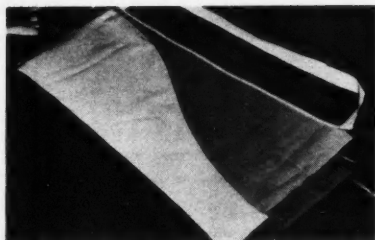


DIAGRAM B

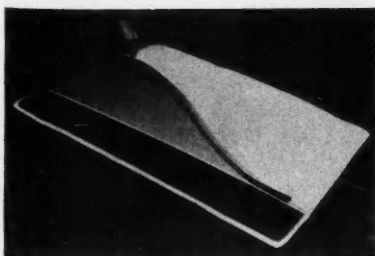
*This type of stitch is also a double stitch. It is mostly used for sewing two sections of material together such as the two-tone pieces of material that were used for the door panel in this particular story.*



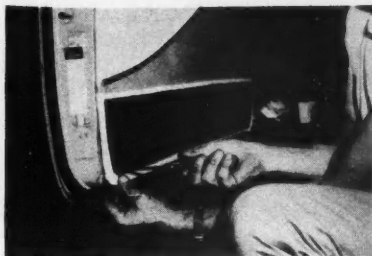
5. Here is door panel with all sections sewn together and ready to be stretched over the door panel board and stapled secure.



6. It is best to start at the bottom and work up from each side. As door panel covering is stretched on, it is then stapled.



7. After door panel covering has been secured, trim is then installed and openings for window and door handles are cut out.



8. Door panel is attached to door in the same manner as it was originally. Corners can be secured with small metal screws.



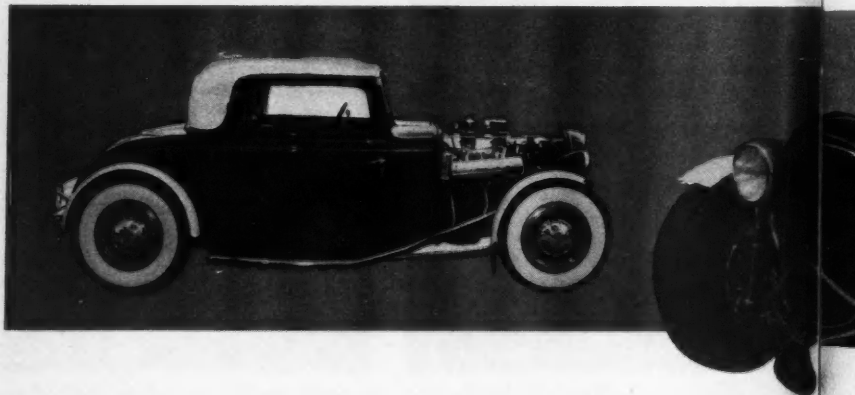
# Two-Tone

WE WERE in Indianapolis the latter part of May to take in the "500" Mile Memorial Day race, so we drifted over to the Fair Grounds to take in the Indianapolis Motor World Fair. Producer Karl Kleve had assembled an outstanding collection of hot rods, custom, sports cars, antiques, novelty machines and other things automotive for this annual show, so we wanted to see what was going on away from our home area.

As we walked in, we looked left and that was as far as we got for quite a while because we saw an immaculate little coupe which we had to have for a car feature. We

## All Weather Coupe—A Real Charger Even When

*Chopped two inches; channeled 7-inches, Dago front axle and rear frame rails Z'd. When all of these methods were applied to Gene Lade's '32 coupe, he ended up with something low but something that would still afford comfort to a six footer like himself. Exposed exhaust system is homemade with special mufflers. Fenders anchor to backing plates.*





# and Torrid....

By Ray Brock

saw a tall guy standing next to it who turned out to be the owner, Gene Lade. We learned that Gene had driven the car all the way from Holbrook, Massachusetts, where he and several friends had built the car from what was originally a '32 Ford three window coupe.

Since Gene is well over six feet tall and needed head room, the top was given only a moderate two inch chop. Next, the body was channeled seven inches, the frame was Z'd in the rear and reworked in the front.

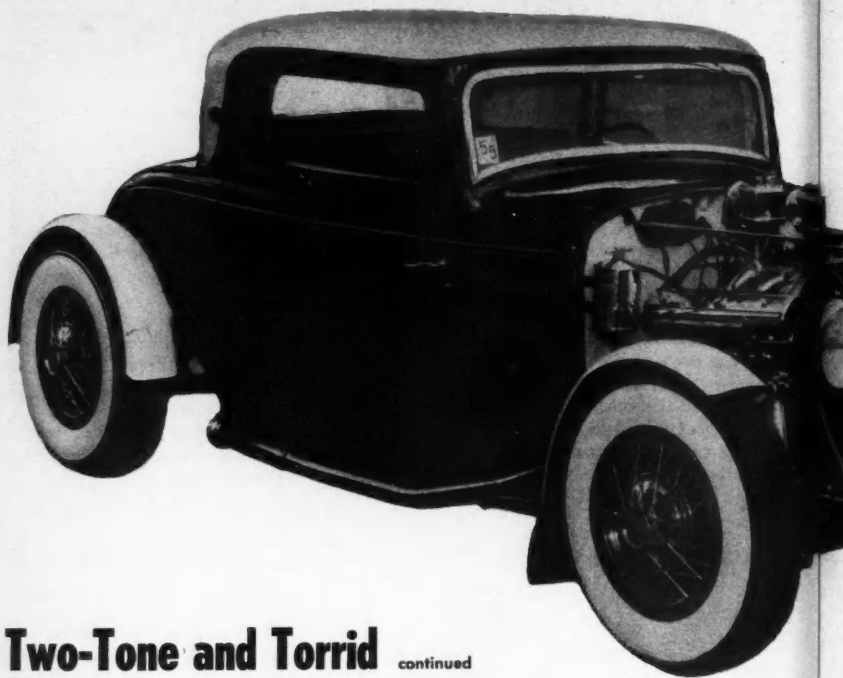
A stock 1949 Cadillac engine was fitted with an Offenhauser dual manifold and buttoned up to a '42 Merc transmission with

Zephyr gears. With lots of horses available from the Cad, more top gear was needed so Gene used a two speed Columbia rear axle.

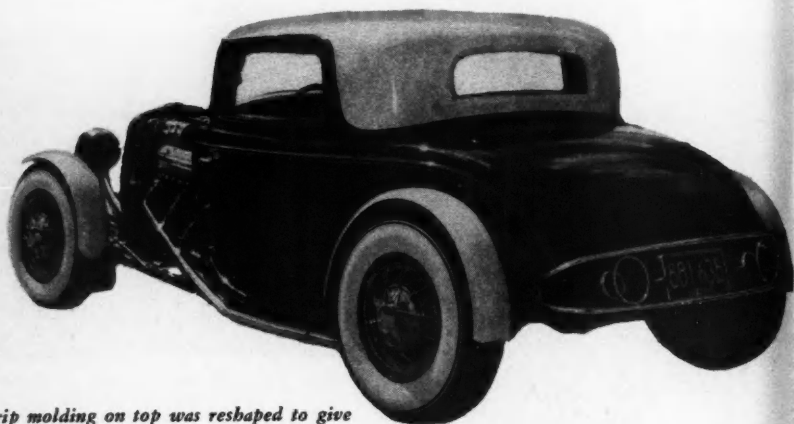
The whole car attracts attention with its dark red and ivory paint job whether it is used as a show piece or out on a cross country cruise. On the highway, performance matches looks, which is something that makes this car real functional. Even during those crazy Massachusetts winters, this little deuce is an all weather machine with fenders and a nice warm interior. Too bad Gene has to cover up the chrome engine accessories with a hood when the snow flies.

## the Snow Flies



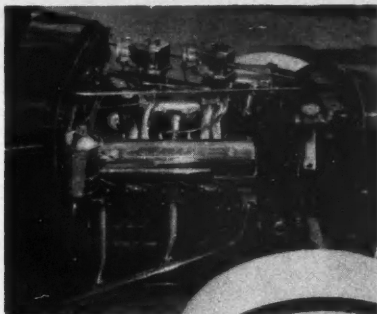
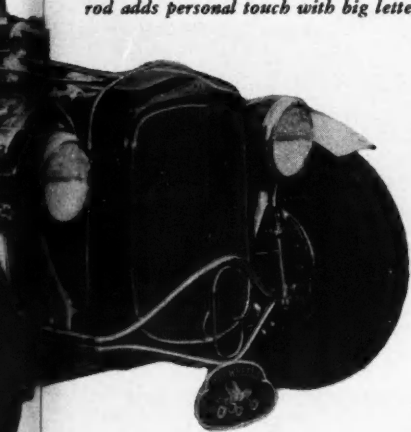


## Two-Tone and Torrid continued

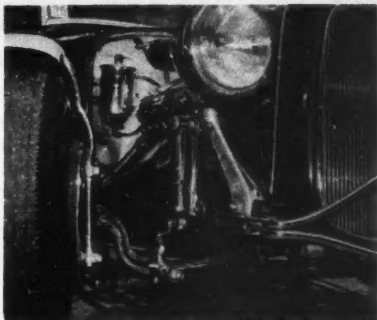


*Drip molding on top was reshaped to give a hardtop effect with two-tone paint. Rear nerfing bars are tubular and cold roll rod.*

*Good '32 grilles are hard to come by these days so Gene formed some heavy wall tubing into nerfing bars to protect his. Formed rod adds personal touch with big letter 'G.'*



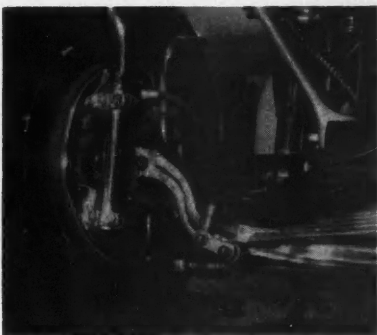
*Engine compartment has stock '49 Cad except for Offenhauser dual manifold with Holley carburetors. Headers are homemade.*



*Front end features a '30 Ford spring with a special main leaf, Monroe 50/50 shocks, special cast aluminum headlight brackets.*



*Lawrence's Top Shop of Brockton did the custom interior featuring a glove box in divider between seats. Belts anchor to frame.*



*Tubular fender brackets are fastened securely to '42 Merc backing plates by use of tie rod clamps. Spindles, hubs are '42 Merc.*

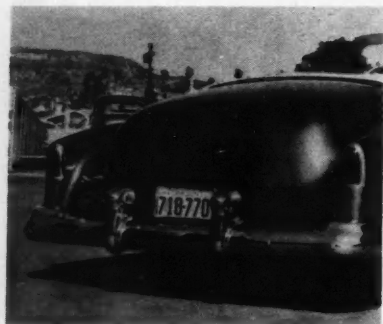
# RAGTOP VETERAN

Photos by Bob D'Olivo



*One of the largest assets the Chevy ragtop possesses is the clean and uncluttered body lines that gives it that custom appearance. Small side trim strip is from '51 Pontiac.*

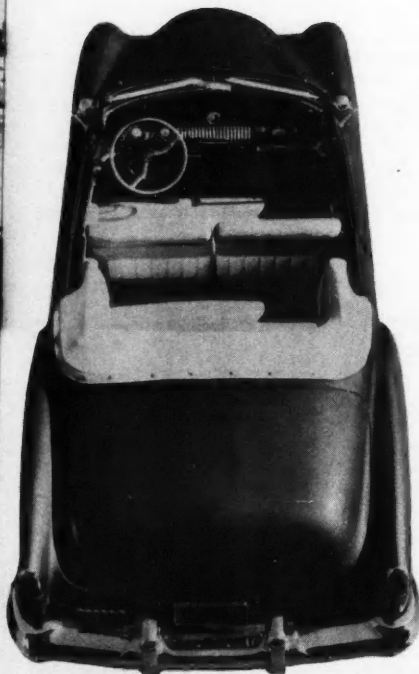
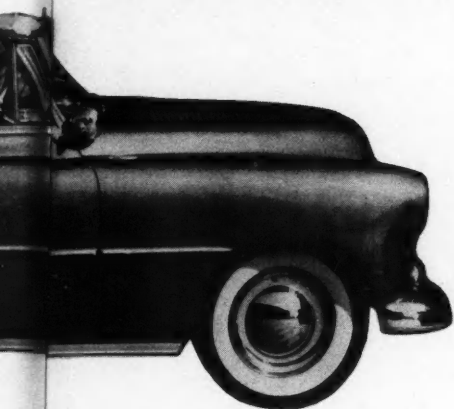
*To achieve grille styling, Tom filled in the upper portion of grille, down to the stock grille's top bar position with sheet metal. Hood has three rows of louvers.*



*The rear end styling consists of: '51 Olds (88) rear bumper that contours rear fenders perfectly, '51 Kaiser taillights grafted on the rear fenders and minor trim removal.*

*Top view of the car clearly displays immaculate interior. Color combo is pink and white and was designed by Tom's mother. White's Upholstery Service did all work.*

## Oregon's Stovebolt Custom Has Seen Winner's Circle Thirteen Times, from Seattle to Los Angeles



AND NOW, the winner of the semi-custom convertible division—Tom Charter!"

One of the greatest experiences that a guy can encounter is the proud feeling of being a *winner*. Tom Charter, a resident of Hermosa Beach, California, has been to the judge's glittering trophy altar not once—but thirteen times.

It all started back in '51 when Tom was residing in Portland, Oregon, and was in the market for a new car. He had direct aims to restyle the new car he was about to buy, so considerable thought was given to what body style, of that particular year, would work out best for customizing. His final choice was a new Chevy convert. The car was practically driven directly from the showroom floor to Master's Body and Fender Shop, of the same area, for immediate work.

Before the restyling work started, Tom's mother and father, who had been encouraging him from the start, sat down with their young enthusiast and held a pow-wow as to what the car should look like when completed. "This was really a switch," declares Tom, "especially, since Mom's ideas were much greater than those of Dad's and mine. She gets credit for the grille, rear fenders and the interior, and what the heck, that's the whole car!"

When asked to recall what he thought was his most important auto show victory, he paused, then related, winning Portland's Annual Auto Show's Sweepstakes Award was really the big moment.

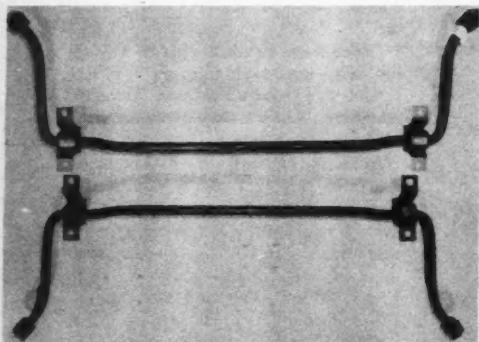
Since moving to Southern California, Tom has given the local custom car contingent a fast run for their trophy awards at all the auto shows, netting a total of nine. It's an easy situation to decipher. At the next auto show if you happen to see a blue-green Chevy convert squatting in the line of show cars and one dons a descriptive sign saying: Owner: Tom Charter, Styled By: Peg Charter, then this decoded means—**COMPETITION**—spelled with capital letters.



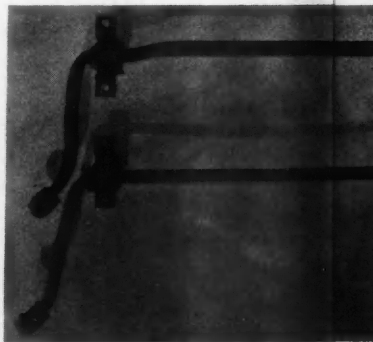
A FRIEND OF OURS came into the office the other day and announced that he had just bought a new automobile. He launched into a descriptive tirade about color, upholstery, style and how he wasn't even going to touch the engine because, after all, the thing had over two hundred horses straight from the factory. We did finally get him to admit

that there was at least one flaw in the gem, however—seems as though he almost died of fright the first time he tried to charge through a corner the way he used to with his '40 Ford coupe.

Our friend had a problem but it is a common problem that has a simple solution. The first step is to correct body roll, and this leads



Top stabilizing bar is '55 Chrysler but also fits '55 Plymouth. Left car top of page is stock, other has bar.



Top bar was removed from the '55 used to replace other bar from '49





## CURVES

### MILD SHOCKS, SOFT SPRINGS AND LOW PRESSURE TIRES GIVE EASY RIDES BUT POOR HANDLING QUALITIES

to an analysis of what stabilizes a car with independent front suspension in the first place.

The front stabilizing bar is the answer for most independent front suspensions. When the modern automobile corners, the stabilizing bar's job is to transfer some of the leaning body weight from the outside front wheel to

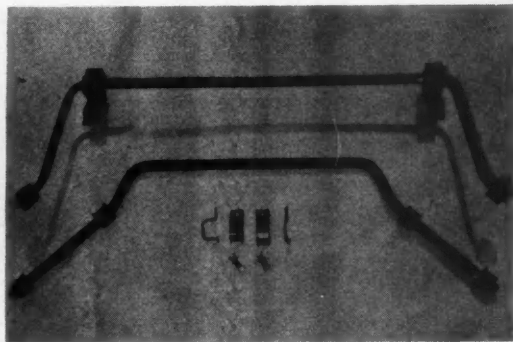
the opposite side of the car where it creates lift on the inside wheel. This action pulls the body down to the inside wheel and prevents excess roll. If this bar were completely non-flexible, weight on the outside wheel would produce equal lift on the inside wheel and there would be no lean at all. The only thing wrong with this arrangement is that it would tie both front wheels solidly together and should one front wheel hit a bump, the other would feel it too. With this arrangement, why even bother to have independent springing—the wheels wouldn't be independent.

So, the way things are fixed, each wheel has its own spring and will take a pretty fair sized bump without affecting the other wheel.

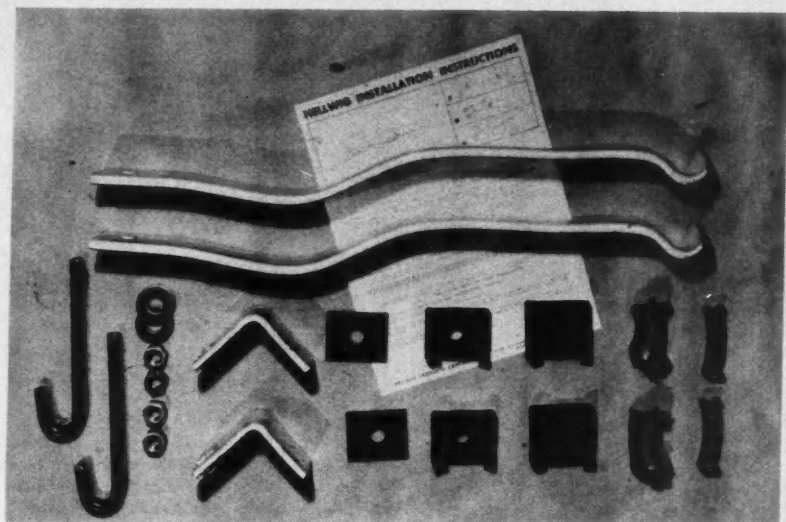
CONTINUED ➡



*Plymouth tested and then Ford which is much lighter.*



*Lower bar is '50-'53 Ford station wagon but will fit any Ford passenger car from '49-'53. Extra clips needed for '49 jobs.*

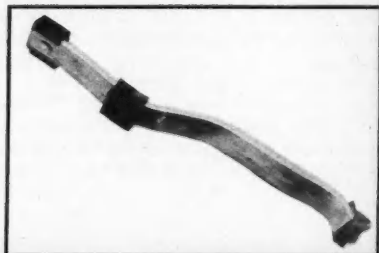


*Hellwig kit for front coil springs can be installed in 15 minutes, can be used to offset weight of larger engine by adjusting tension. Leaves stabilize car, keep car from bottoming.*

## **INEXPENSIVE BOLT-ON STABILIZING KITS CAN IMPROVE ANY CAR—**

This is because the stabilizer bar has built-in torsion which must be surpassed before the opposite wheel will lift. The springier the torsion stabilizer bar, the better the independent system works, but more body roll will be encountered on corners. Since soft rides are the order of the day in modern automobiles, the stabilizing bar is not too big and the body roll is pronounced. The obvious solution is to strike a happy medium.

This can often be accomplished by checking with the parts department of your local dealer. Heavy Duty or Police kits are sometimes available which contain a larger diameter front stabilizing bar that will make a world of difference on a standard passenger car. If a heavy bar isn't listed as Police, Heavy Duty



*Leaf ready to be installed has bushings on all contact points to prevent any noises.*



*Tongue of leaf fits between coils about midway in spring to help absorb the load.*

or Export, take a look at the one listed for station wagons.

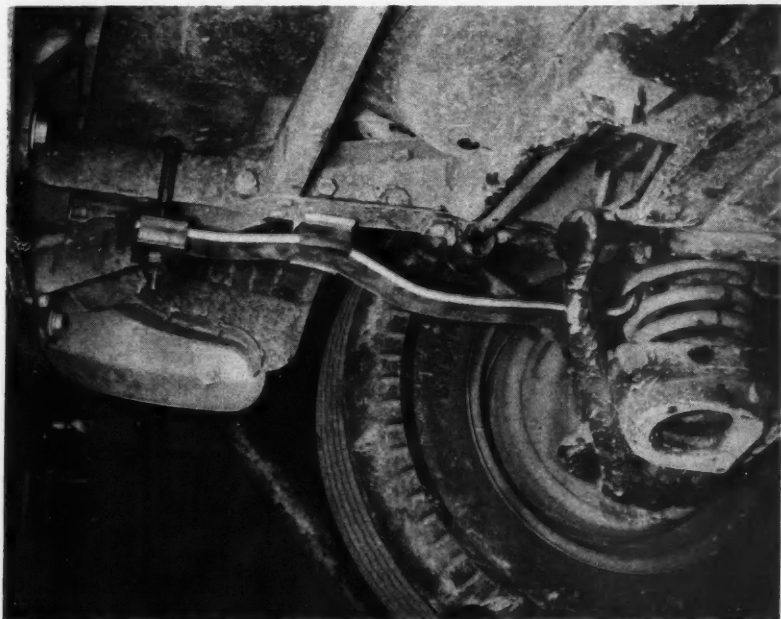
If you don't come up with a heavier stabilizer bar using this method and your car is one of the Big Three (GM, Ford or Chrysler), see how big a bar your car's big brother has. In other words, if you have a Plymouth or Dodge, and a heavy duty stabilizer bar isn't listed, compare one for a DeSoto or Chrysler. Sometimes they are interchangeable with those of the lighter models.

If heavy duty bars just aren't available or you want an even stiffer setup on your car, the best bet is to use stabilizing accessories. There are several types available but we selected the Hellwig line to illustrate in this article since they are available for all cars, are simple and therefore easily installed and are not too expensive. With Hellwig stabiliz-

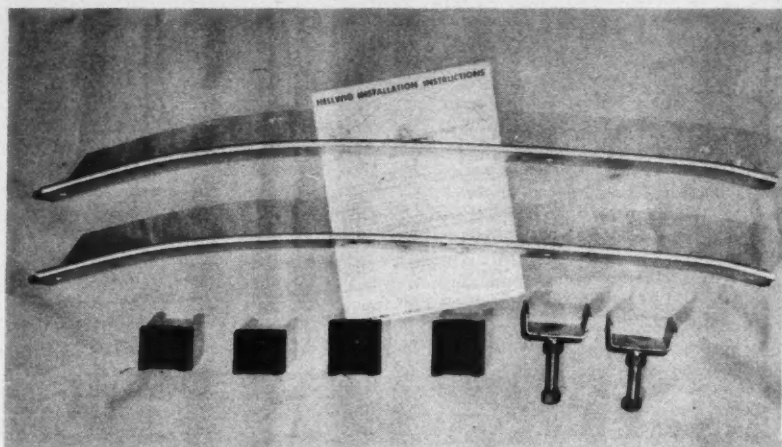
ers both front and rear, a car which has been feeling too limber suddenly becomes a new automobile. It remains much flatter on corners, the drive shaft will not torque up on fast takeoffs to rub the underside of the body and the stabilizers are completely adjustable for overload uses.

The final hint we have for making your modern car more roadable is to install heavier shocks. As we explained a few months ago (CCM May '55), shocks can completely change the handling aspects of your car. They will not correct the amount of body roll as heavier stabilizing bars or Hellwigs do but they will change the rate of roll. For example, if a stock automobile is driven through a corner fast, the light stabilizing bar will allow the car to roll quite a bit and the light stock

*(Continued on next page)*



*Finished installation of Hellwig stabilizers on the front of a '54 Oldsmobile. These back up the bottom few coils, make them take a big load while top coils absorb light jolts.*



*Torque control leaves for rear springs can also be adjusted to use as overloads. Nearly all California Highway Patrol cars are equipped with Hellwigs for increased safety.*

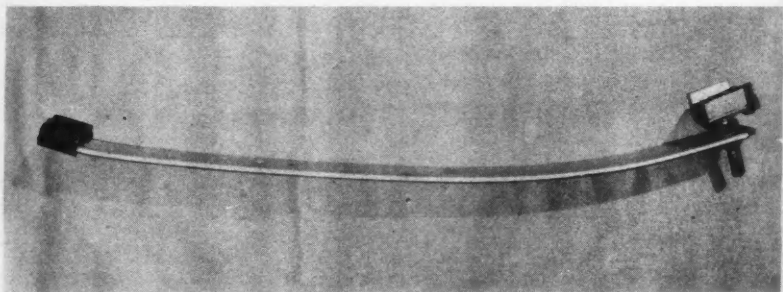
*(Continued from preceding page)*

shocks will allow it to do so in a hurry. Even with the stock stabilizer, stronger shocks do not allow the car to lean over in a hurry, but slow down the action.

If you are one of the millions who hustles right along when out on the highway or if you do a lot of driving on rough back roads or if you just don't like the way your car feels, here's some advice. Stabilizing devices

and stronger shocks can be one of the wisest investments you ever made.

We had Hellwig, of 6231 San Fernando Rd., Glendale, Calif., equip our own late model sedan with stabilizers on all four corners and then went over to A. J. Swanson for a set of stronger shocks. Since we made these changes, we have been known to challenge sports car drivers to drag it out on any kind of terrain. Wonder if they'll let us enter the next Pebble Beach Road Race?



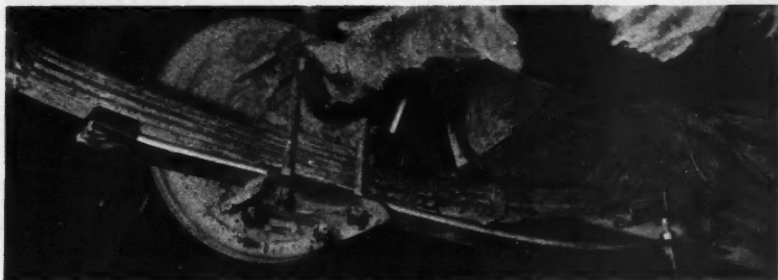
*Ready to be installed, torque leaf gives added strength to stock spring and prevents spring wrap caused by torque on sudden acceleration. Tension is easily adjusted.*



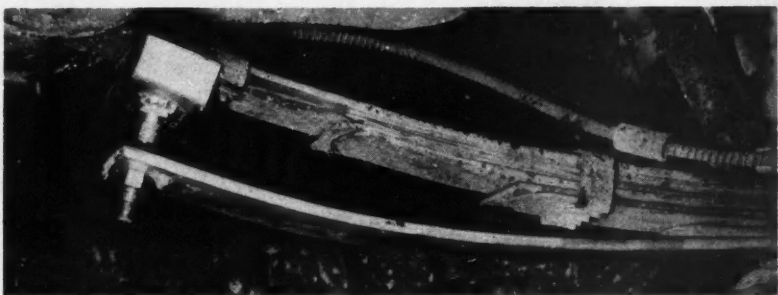
*With car weight taken off springs, spring clip plate must first be taken loose.*



*Extra Hellwig leaf is inserted beneath the stock spring then clip plate fastened up.*



*This is what the finished job looks like with the rear torque controller in place. Other types are available to fit cars which have coil springs for rear suspension.*



*Front of torque control leaf has adjustment which can be changed with wrench from the side of the car without raising it. By moving leaf away from spring, tension grows.*



Carroll Gentry



Robbie Martinez

## STYLERS BODY SHOP

# RES

ONE OF the busiest custom shops in the country is a small two man stall located in National City, California. The shop goes under the handle of Stylers Body Shop, which many of you will recall as being the builders of numerous cars featured in CAR CRAFT and our companion mag HOT ROD. When we visited Carroll Gentry and Robbie Martinez, co-owners, they informed us that they had just turned out the fourteenth semi-custom for that week and had another prosperous group awaiting the forthcoming six days. This successful partnership dates back to a year and a half ago when both boys, in business for themselves, threw their lead pots together and set out to corner the customizing market of lower Southern California. This they have succeeded in doing. Four customs were entered in last year's International Motor Revue and Motorama show under the Stylers'

banner, with one taking home first place in the semi-convertible class, a good average in anybody's language. This year's plans include a total of eight to ten cars for an all-out assault on the glittering gold goodies. It's really strange to see what happens when the weekend rolls around, for these two guys seemed to be just shifting into high gear. If Robbie isn't customizing his late Olds, you can find him tooling a rapid coupe dragster at one of the local drag strips. Gentry, on the other hand, does his best trying to keep the '55 Chevys in his rear view mirror at the local tarmacs with his new '55 Buick Century. All in all, the guys are 100 percent car hounds fifty-six hours a week. They cordially invite a friendly stop-over and guarantee some hot bench racin'. The address is: Stylers Body Shop, 1725 National Avenue, National City, California.



*The completed car with its rejuvenated styling lends more length over the stock body lines. The wrap-around windshield tends to minimize the top's height. For comparison, stock Chevy appears at left.*

# STYLES

## THE '51-'52 CHEVY CLUB COUPE

WHEN SPEAKING of cars that come up to the standards for natural custom bait—the '51-'52 Chevs can pile up quite a few points. This particular year's body style is such that many inexpensive routes can be taken without duplicating something that you've possibly seen elsewhere.

Stylers Custom Shop has given the coupe what could be called the latest modern treatment. The initial body work consists of the standard items such as nosed, decked, door

handles removed with an electrical system installed, splash pans molded to the body, bumper trim removed with holes filled and general trim removal. The components that offer the modern theme are mainly the grille, windshield, wheel openings, side trim and taillights.

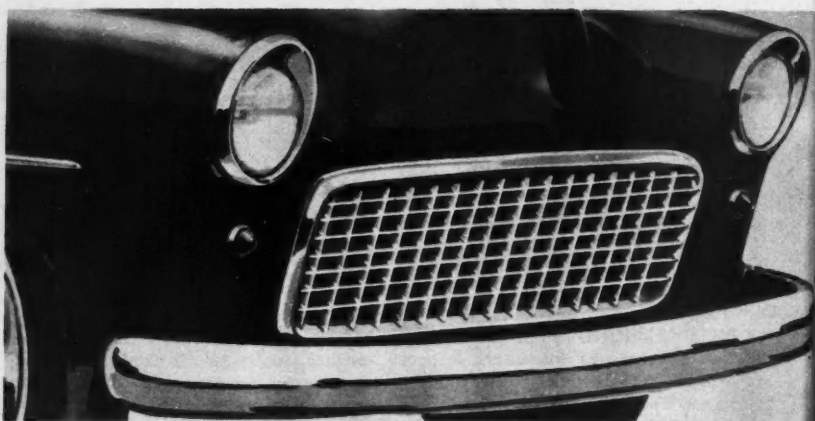
For the grille installation a considerable amount of rehashing was necessary. The stocker was completely removed. Fenders

*(Continued on next page)*



ILLUSTRATION BY DON FELL





*(Continued from preceding page)*

were V-cut at each front corner, then pulled in and worked back at an angle to correspond with the '55 Chevy grille. The grille's metal frame housing the waffle center section had to be filled in at its various seams, including the upper frame bar, which is the large stock hood seam. With grille assembly solidly installed, the hood of the custom, when closed, merely meets the grille's top frame bar.

The '55 Olds chrome headlight doors proved to be no hassle to adapt. The stock rims were removed, the Olds rims installed, and then fenders filled in with sheet metal to conform with the new rim's overhanging contour. To fill blank fender area between the headlight and bumper, small '55 Olds parking light units were built in. The side trim consists of a '54 Pontiac strip contoured to the rear fender of the Chev. At the rear, several small openings are cut into it simulating an aircoop. Each one of these small openings has a chrome, mesh screen facing. By utilizing this particular side trim, a two-tone paint job could be easily applied with the trim acting as a unique dividing line. Wheel openings have been given the '55 Olds Holiday styling with their rear sweeping taper. Fender treatment of this type is becoming a very popular fad.

One of the most notable changes is the full wrap-around windshield. The '55 Plymouth windshield was used because its wrap-

*The grille styling proves out the point of simplicity being the ultimate. Headlight rim's over-hang harmonizes with angled grille perfectly. Note front fender angle and frontal customizing compared to stocker.*

around curve is less severe than some of the other '55 models. Its radius fits like a glove, once the top is chopped back and the upper door sills modified.

The rear end styling incorporates the popular forward look by using the recessed '55 Plymouth taillights. Fenders take on approximately a four to five inch extension with this arrangement. A bumper was needed to contour the new taillights, so a '55 Pontiac bumper was installed with elongated exhaust tips molded into it. The rear splash pan had to be reworked slightly to match the Pontiac bumper's contour.

To put the finishing touches to the small coupe, the shop lowered it approximately three and a half inches fore and aft. Stylers' lowering kit was used in front, while at the rear, the frame was C'd and springs de-arched. Trim accessories include '54 Chrysler hubcaps, spotlights and radio antenna. This equipment is all optional.

The finished product displays clean, uncluttered styling. Each innovation tends to enhance the other, with the end result being a pure custom.

# **RESTYLE CHEVY CLUB COUPE** continued



## **PARTS AND PRICE LIST:**

	LABOR	PARTS
Restyling grille ('55 Chevy grille)	\$ 65.00	\$ 31.90
Installing headlight doors ('55 Olds)	60.00	14.76
Installing parking lights ('55 Olds)	4.00	6.40
Front bumper: fill in holes and rechrome	20.00	—
Nose and peak hood	45.00	—
Install wrap-around front windshield ('55 Plymouth)	500.00	127.00
Recut and taper front wheel openings	70.00	—
Install side trim ('54 Pontiac)	40.00	33.40
Mold door handles and install electric solenoids with push buttons	30.00	19.95
Build simulated airscoops in side trim	40.00	—
Recut and taper rear wheel openings	70.00	—
Remove deck trim and install electric solenoid with push button	23.30	9.95
Restyle taillights ('55 Plymouth)	80.00	18.80
Install rear bumper ('55 Pontiac)	20.00	46.55
Cut exhaust tips through bumper, mold and rechrome	50.00	—
Lower front end using Stylers' lowering kit and align	50.00	—
Lower rear end by de-arching springs	25.00	—
C-Frame rear frame	20.00	—
Hubcaps ('54 Chrysler)	—	46.00
Two-tone metallic paint job (lacquer)	150.00	—
	<b>\$1362.50 Labor</b>	
	<b>334.71 Parts</b>	
	<b>\$1717.21 Total</b>	

*The large rounded rear section of the '54 Pontiac side trim has been cleverly made into a simulated airscoop. Four slots were cut out and chrome screen used for facing.*

*The '55 Plymouth taillights gave the Chev's rear fenders approximately a five inch extension. Fender extensions were brought out to meet taillight's frame, can be frenched in.*

The Professional Method  
of Shortening Two Types  
of Driveshafts



## CHOPPING A DRIVESHAFT

### OPEN DRIVE LINE

Photos by Bob D'Olive



*The long Chrysler driveshaft pictured above is stock length of 60 inches but was too long to fit a special short wheelbased sports car. Shorter 24 inch shaft was made from the long shaft as shown in following steps.*

ONE OF THE MOST common problems encountered when building a car of your own design is the need for a specific length driveshaft. This same problem often comes up when the popular practice of merging a large displacement engine with a light chassis occurs. With an ever increasing tendency to move the engine back for better weight distribution, the need for a longer driveshaft seldom arises, but the shortened drive line is in constant demand.

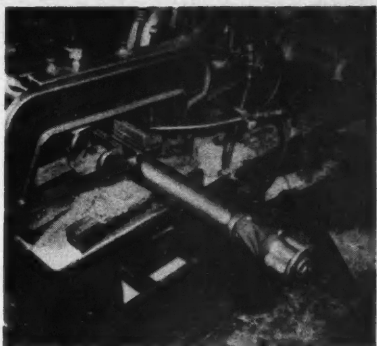
We stopped in at Cook's Machine Works, 4843 Anaheim-Telegraph Road in Los Angeles, to get some pictures on driveshaft shortening operations. Since way back in the thirties, Cook has been known as the man who could settle any machining problems that might arise when building anything different in the automotive line.

We learned from Cook that it is a fairly simple procedure to shorten an open driveshaft that has a constant diameter tube between the universal joints. The tube is merely cut to the desired length, the universal yoke cut from the discarded portion of the tube inserted in the shortened shaft, aligned and then welded.

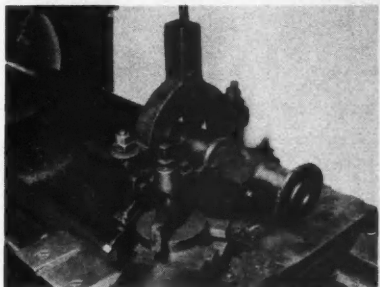
For open driveshafts with tapered ends, a different procedure must be used. The shaft must be cut in the middle where the tube diameter is constant and a section of tube removed. With the required section removed from the center of the tube, a short length of smaller tube with an outside diameter approximately the same size as the inside diameter of the driveshaft is inserted inside the driveshaft. The cut ends of the driveshaft are then slipped together over the smaller tube and welded. A gap may be left between the ends and both pieces of the driveshaft welded to the inner tube or a few holes drilled in the outer tube so that the inner sleeve may be anchored with plug welds. With the cut in the center of the driveshaft, the tube should be checked for alignment before using and straightened if necessary.

With torque tube drive lines, two situations arise. One is the Ford type with the outer torque tube and solid inner driveshaft. The

*(Continued on page 41)*



*The first step was to determine the length of tubing needed between universal yokes to give the correct length, then cut tube.*



*By setting up the unneeded piece of shaft in a lathe and steady rest, universal yoke may be cut from tube with sharp tool.*



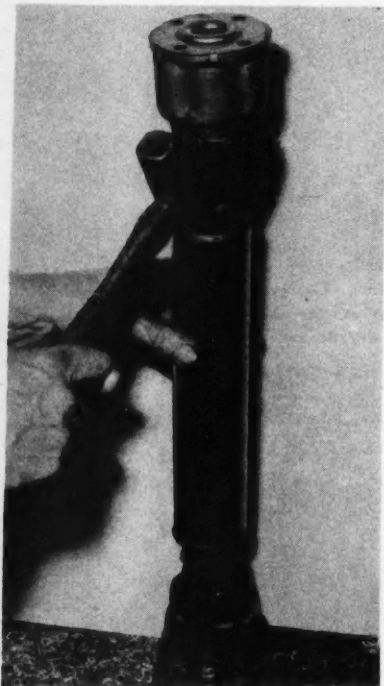
*After original weld is cut away with lathe tool, hammer blows on the tube loosen the yoke from tube and allow it to drop out.*



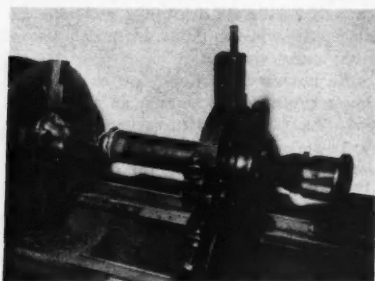
*Shortened shaft before reassembly. Clean saw burr from inside tube with file to allow shoulder of universal yoke to slip in.*



*With the yoke and tube fitted together, it is put in the lathe, aligned and held with small tack welds, then welded all around.*



*Hammer is needed to drive universal yoke into reamed tube end. Universal bearings on each end must be aligned with each other.*

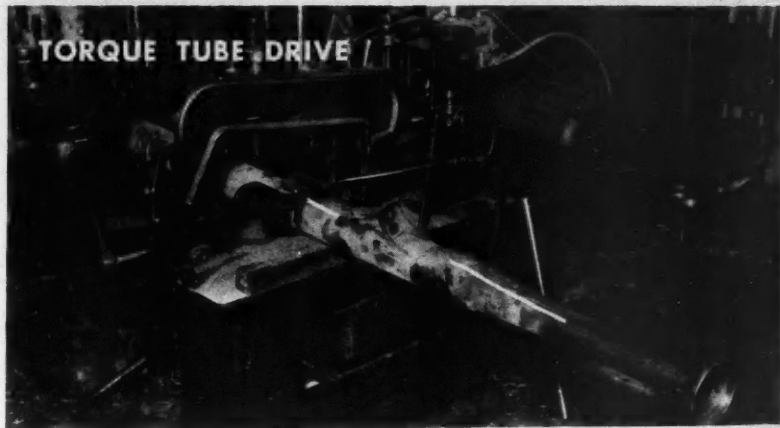


*Weld around joint is now complete. Shaft can be checked for trueness by spinning with lathe. If crooked, cut weld, start over.*



*With shaft still in lathe, a cut is made across the top of weld to eliminate large metal deposits which might cause unbalance.*

## TORQUE TUBE DRIVE I



*Torque tube from '41 Ford is cut to fit a special sports car application. Tube must be cut in uniform diameter behind taper.*

*(Continued from page 39)*

other type is most commonly found on pre-'55 Chevrolets and has a smaller tube driveshaft inside the torque tube.

With the Chevrolet type, the torque tube is shortened the required amount and straightened. Next, the inner drive tube is shortened by removing the splined hub welded into the drive tube, cutting the driveshaft the same amount that the torque tube was shortened, replacing the splined hub and then rewelding it to the drive tube.

On the Ford type, the torque tube is shortened in the same manner as above but the operation on the driveshaft itself is different. The shaft is solid so the same length cut from the torque tube must be cut from the front end of the shaft and the shaft then resplined in a milling machine.

As you have no doubt realized by now, driveshaft shortening cannot be accomplished at home unless you have a large lathe or infinite patience. This article is not designed to encourage you to do-it-yourself but to acquaint you with methods for shortening the shafts. If you know what you want and how it should be done, it should be a cinch to get the job done in any machine shop. Just be sure that the shaft is straight after you finish because if you don't, it will let you know via the noise and vibration route.



*Tube is shortened forward of radius rod bracket. If cut behind this point, bracket must be moved or radius rods altered to fit.*



*Two pieces of tube are fitted together using chalk marks to position them. Tack welds are used to hold parts before final weld.*

## TORQUE TUBE continued

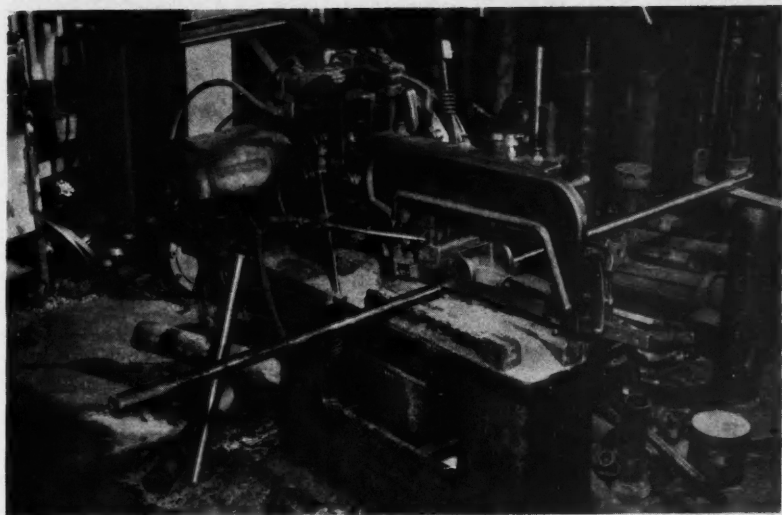


*Arc welding in the middle of the tube causes a large amount of distortion so the torque tube must be straightened. Heat is applied to the weld so that tube may be easily aligned.*

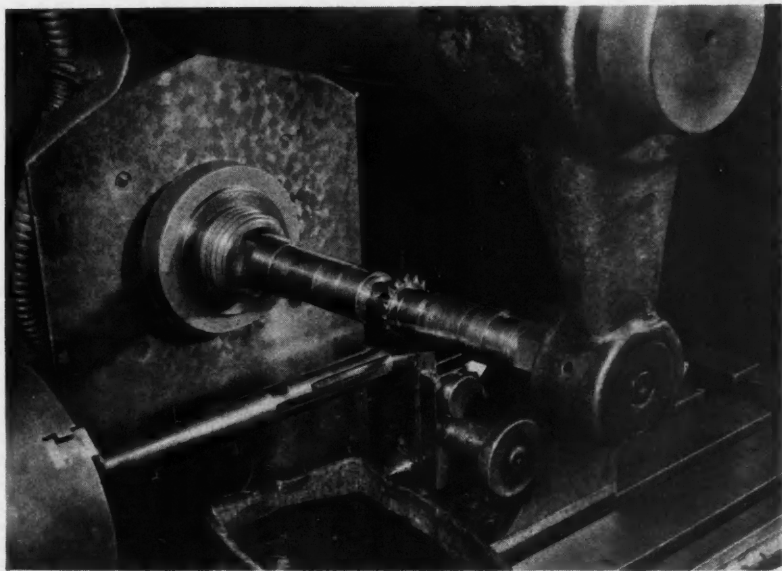


*With the tube revolving slowly, chalk is used to mark high spot. By using heavy bar to pry against high spot, tube is straightened. Tube runs true in lathe when aligned.*





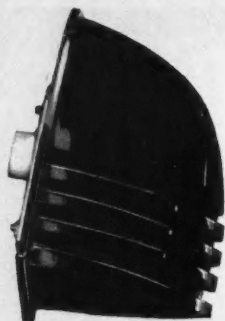
*Solid driveshaft from early Ford can be shortened only by cutting, resplining. Exact amount removed from the torque tube should be cut from shaft so parts will match up.*



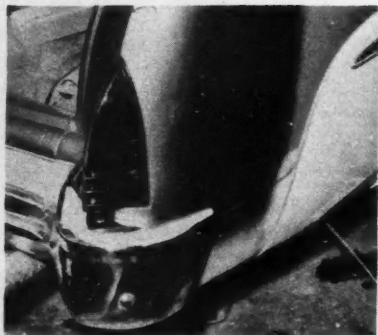
*Cook uses cutter in milling machine to cut new splines on the shortened Ford shaft. Before shaft is set up in mill, it should have a center rest hole turned in the end with lathe.*

## STYLE REPORT:

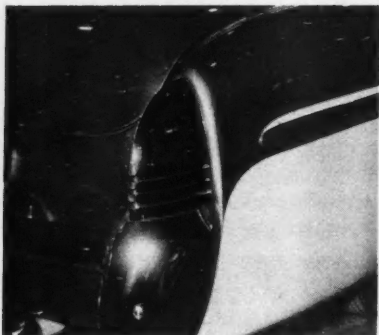
### '52-'54 LINCOLN



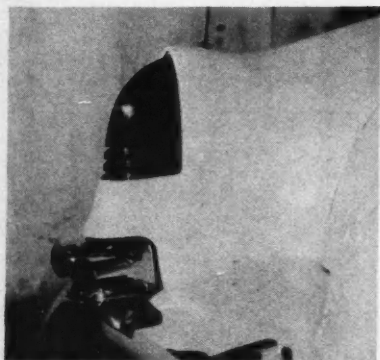
ONE OF THE most favored components for customizing seems to be the large '52-'54 Lincoln Capri taillight lens. When it was first introduced, its extra large size seemed to hinder its use as far as customizing was concerned. But in a very short time custom body shops came up with their personal touch



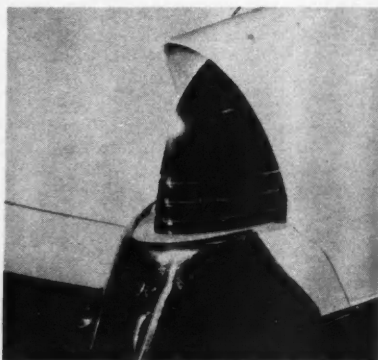
*Most popular approach has been this type of installation. A wedge section is cut from fender with the lens protruding outward.*



*On this late Merc the lens unit has been recessed slightly into fender. Rounded edge surrounding lens is made from tubing.*



*Here the lens gives you the impression of a Cadillac taillight. The fender has been extended considerably to house the lens.*

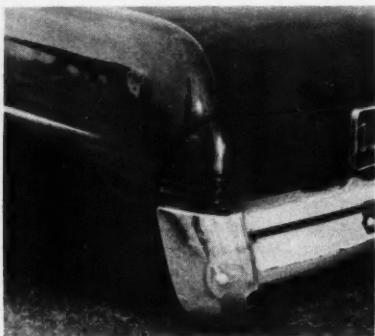


*The new forward look can be combined with the large lens. Lens was merely installed, then a large overhang was incorporated.*

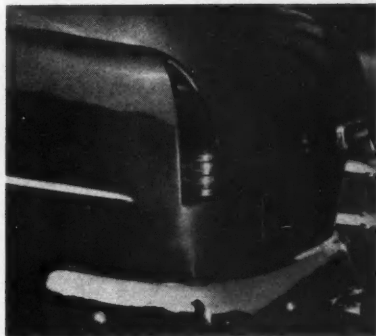
## CAPRI TAILLIGHT LENS

that offered many unique results. Once the shops had the ball rolling, backyard stylists outdid themselves, utilizing it in every conceivable manner possible. A natural for the lens is to adapt it to a '52-'53 Merc in the same fashion that it is located on Lincoln stockers, the result being a scaled down Lin-

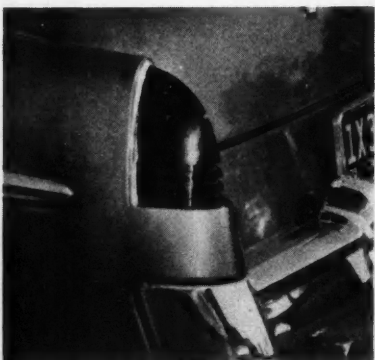
coln rear end effect. For products under the GM banner the unusually large lens necessitate, in most cases, being frenched in to the rear fender, because of its size. Below, on these two pages, you will find eight variations covering all of the basic installation methods from just about every make of car.



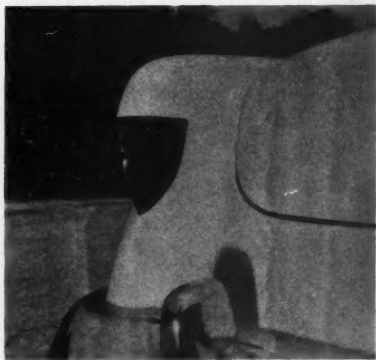
*A very novel styling is this arrangement, with lens frenched low and deep. Note clever bumper and fender opening relationship.*



*To be different, some customizers position the lens high on the rear fender. This particular innovation is on a '52 Chevrolet.*



*A natural for the lens is to adapt it to a late Merc. End result is a scaled down duplication of its larger brother, the Lincoln.*



*An extreme installation is this '52 Ford with lens built in to the rear fenders in an inverted position. This is true customizing.*

**T**HE MAGIC WORD from coast to coast among the nation's clutch-artists is—"DRAG SAFARI."

The National Hot Rod Association has unleashed its second annual Safari crew for all points north, east, south, then west. The special mobile-equipped unit carries all the latest essential gear for staging drag races and a four man crew of drag strip experts consisting of Bud Coons, NHRA Field Director; Chic Cannon; Bud Evans and CAR CRAFT and HOT ROD photographer Eric Rickman. The group is presenting no less than eighteen Regional Championship Drag events, at a different location each week-end, for a solid four months.

The national tour's climax will be a four-day presentation of the first official National Championship Drag event ever staged with NHRA officials and advisors supervising the operations. Dates for this all-out acceleration go-around will be September 29th through October 2nd. Serving as the stage for the big event's debut will be a 7,000 foot runway located in Great Bend, Kansas. This is just about as close as you can get to *smack dab in the middle* for all concerned.

Car divisions of competition will include a total of thirty classes; Gas Coupe/Sedan classes, Altered Coupe/Sedan, Fuel Coupe/Sedans, Competition Coupe/Sedans, Street Roadster, Roadster, Hot Roadster, Modified Roadster, Open Gas, Dragsters and Stock

Cars, plus a class for Four Barrels and two divisions for gasoline powered Sports Cars (0 to 1500 cc and 1500 cc and over).

More than sixty-five trophies will be awarded. Thirty will go to the individual class winners, another thirty for National Record Holders in all classes, then come the big lunkers for the Fastest Speed of the Meet, Top Eliminator and last but not least—National Championship Title Winner. There will also be trophies for such items as the Contestant that Traveled the Farthest Distance, Best Appearing Car and Crew, plus many other special awards and merchandise goodies.

Housing accommodations should be ample but those who wish to make advance reservations are urged to do so by writing: Housing, c/o Chamber of Commerce, Great Bend, Kansas. Camping and trailer site facilities will be available.

Entry fee for the four day dragfest is five dollars (\$5.00). Motorcycles are excluded. Cars must be registered at Great Bend not later than midnight, Friday, September 30th. For entry blanks and additional information, write to National Drags, 5959 Hollywood Blvd., Los Angeles 28, California.

The citizens of Great Bend, like the event's sponsors, National Hot Rod Association, are hoping to make it an all-time *great* among auto sports activities, for the spectator as well as the competitor. *See yuh at Great Bend!*

## COLTON



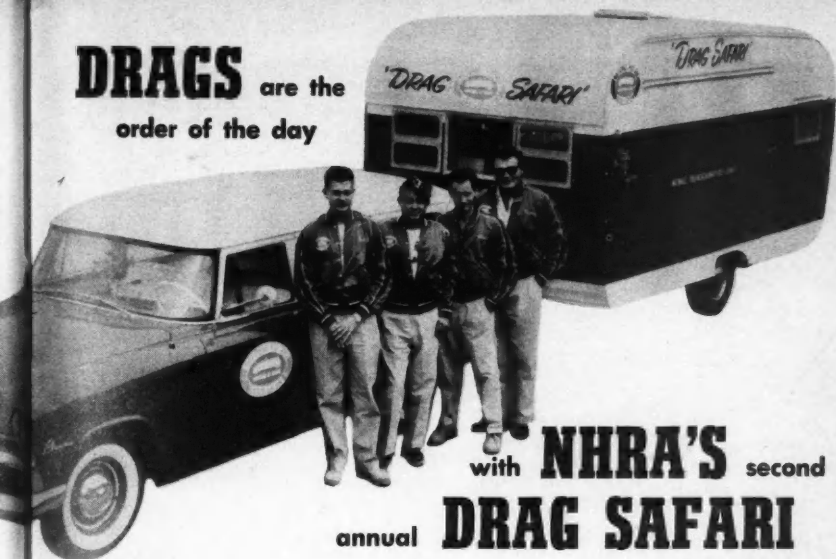
The first meet on the '55 "Safari" schedule was at Colton, California, where Cal Rice got Merc Dragster to the other end quickest.

## REDDING



Next week in Redding, Calif., Pacers club took Top Eliminator honors with '29 A-Merc combination that shut down all other cars.

**DRAGS** are the  
order of the day



with **NHRA'S** second  
**annual DRAG SAFARI**

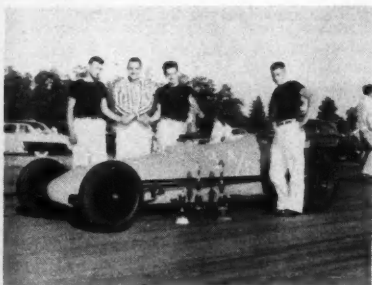
*How is this for a compact unit? All that Bud Coons, Eric Rickman, Chic Cannon and Bud Evans have to do is locate an old landing strip or its equivalent, unload the trailer and hocus-focus, a complete drag strip. Crew is now on four month nationwide tour.*

**DRAG SAFARI SCHEDULE**

Denver, Colorado—July 3 & 4  
Sioux City, Iowa—July 10  
Kansas City, Missouri—July 17  
Indefinite—July 24  
Columbus, Ohio—July 31  
Orange, Massachusetts—August 7  
Indefinite—August 14

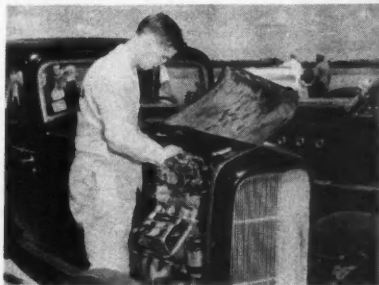
Allentown, Pennsylvania—August 21  
Elizabeth City, N. C.—August 28  
Lake City, Florida—September 4 & 5  
Memphis, Tennessee—September 11  
San Antonio, Texas—September 17 & 18  
Amarillo, Texas—September 24 & 25  
National Championship Event: Great Bend,  
Kansas—September 29 through October 2

**PORTLAND**

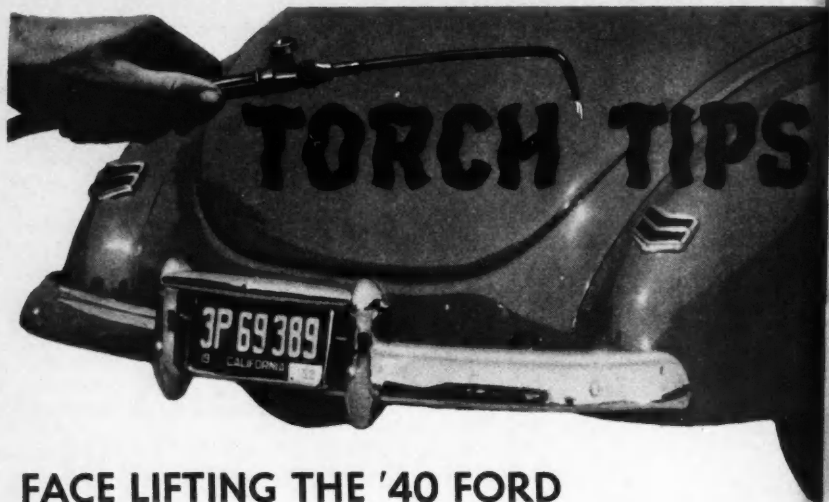


*Third "Safari" stop was in Portland, Ore., where Blanchard-Eayers went 135.54 mph and took home everything but the strip.*

**SPOKANE**



*At the Spokane, Wash. meet, Dick Flynn kept going as others fell by the wayside and won Top Eliminator cup with DeSoto-Ford.*



## FACE LIFTING THE '40 FORD

ONE OF THE greatest improvements that can be made on the immortal '40 Ford is to give it a face lifting in the bumper department. The popular trend is to replace the straight style stockers with bumpers from the '46-'48 Ford. These later bumpers fit the rounded contour of the body much better and look as though they were originally made for the '40 in relation to size.

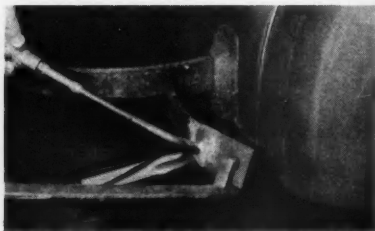
Like all component switching operations, there is a trade secret to heed. If the bumper from the late Ford is merely bolted on to the stock bumper brackets the bumper will

smile back at you with a dollar-size grin. This is considered the lowest in the code of the younger set, and this is where our story begins.

Below, you will find a step-by-step procedure, that of bending the bumper brackets in such a way as to eliminate said smile. Another tip to remember is that the late style bumpers have to be used in their designated spots: front to front and rear to rear. You'll need access to a torch. If one isn't handy, the nearest fender bending emporium will accommodate you for little cost.



1. First step, after removing stock bumper, is to align new bumper with end brackets.



2. Outside bracket is then heated and bent upward to an approximate 30-degree angle.



**3.** Once again the new bumper is refitted to check out the proper bolt alignment.



**4.** Outer bracket's depth from body is measured, then transferred to inner bracket.



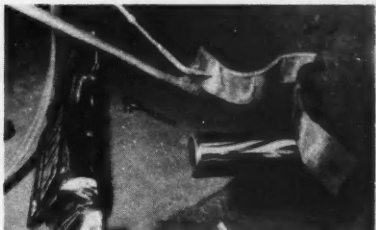
**5.** Chalk markings indicate where inner bracket arm should be heated for bending.



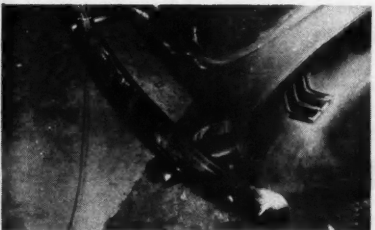
**6.** The inner bracket is heated and first bent out toward the outside bracket arm.



**7.** Second bend of inner arm consists of bending it to align with outer bracket.



**8.** Heat tip of inner bracket and bend it to the same degree as outside bracket.



**9.** Install the new bumper and check out all the bolt holes and bracket alignment.



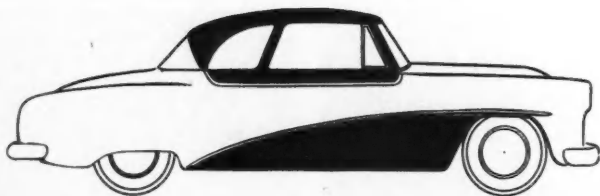
**10.** With bumper properly aligned, all that is needed is to button up guards and bolts.



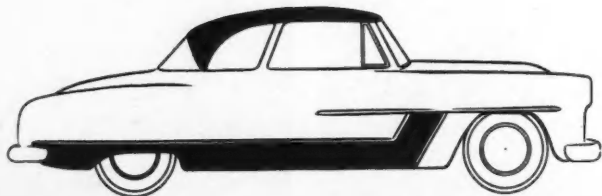
# "GRAB BAG"

## Two-tone Paint—Divided with Restyled Side Trim Is Proving to be the Latest Gimmick with Customizers

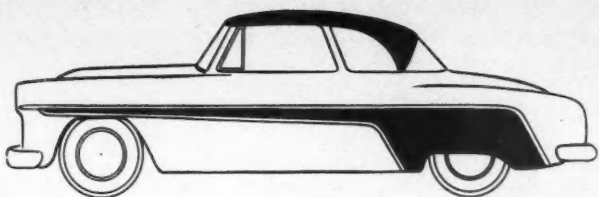
CUSTOM SHOPS have divided two-tone painting with side trim in a restricted manner for the last three years. The sole reason for its restricted practice is because side trim three years ago was far from what it is today. You could say that Detroit has gone completely wild with trim styling in the past two years on their production line stockers. To the die-hard customizer—this is the greatest. Now he can practically backyard design any side trim he wishes and can split his car into as many sections as he wants by merely using complete trim sections or by matching various contoured pieces. On the following two pages you will find some of the popular customizing patterns displaying how colors can be divided up by using some of the latest side trim.



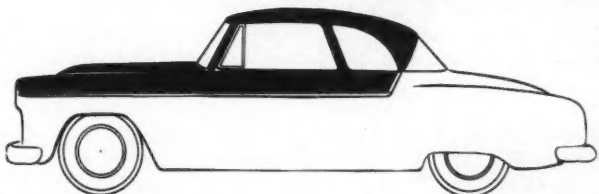
*The late Buick spear trim is a natural for emphasizing low and lengthy look. Forward chrome piece can be used alone, or rear section can be carried through over the rear fender. The '55 Merc trim used just under the windows is a new gimmick for lower body illusion.*



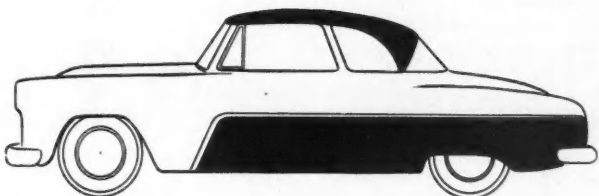
*The '55 Plymouth is one of the most versatile side trims out. Various designs can be thought out by using trim in unorthodox manner. It looks good stock as shown here, or can be broken up into single pieces for one line dividers running forward or to the rear.*



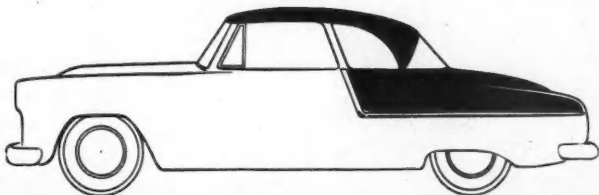
*The popular "Forward Look" trim, '55 DeSoto, is much like the Plymouth with respect to unlimited possibilities. Either the upper or lower sections could be used separately for a single theme or stock installation offers a unique two-tone arrangement for custom cars.*



*A clever design treatment is to utilize trim from '55 Pontiac. As it is used here, the spear runs forward in a reversed position as compared to the stock Pontiac style. This trim works out very well for '49-'51 Fords, either as shown or installed in stock fashion.*



*This illustration was designed to show you what can be accomplished by using a section of trim from either the DeSoto, Plymouth or Pontiac for dividing off a lower body section. This installation could easily be reversed with the trim running forward if desired.*



*Possibly the most used trim for two-tone painting is the late Oldsmobile's rear fender strip. It harmonizes exceptionally well when top's color is carried down over deck and rear fenders. The trim can also be reversed and adapted along lower section of body.*



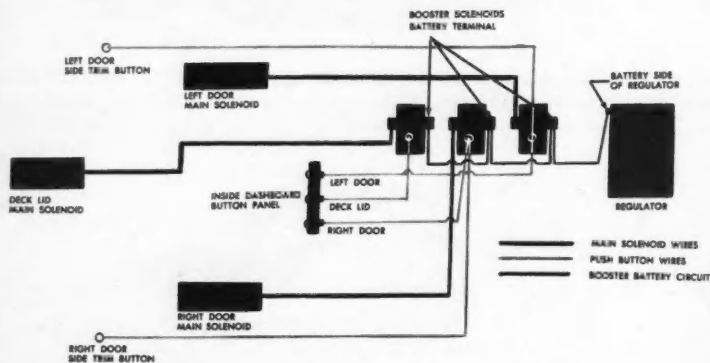
# BUILDING A CUSTOM

CONCLUSION

Photos by George Barris

**WE BUTTON UP** our "Building a Custom" this month with Part VI—the concluding step to the series. We say *button up* because that just about pin points the story's theme—push buttons and solenoid installations for both doors and deck lid. This particular article concerns itself with more than just the '52 Merc Monterey that we have been hammering away at for the last five months. It is a complete backyard instruction sheet for installing the electrical door and deck lid kits yourself. The method of installation is universal and applies to any make of car. There is one phase of the story

you should pay particular attention to. When installing the main solenoids on the inner side of the doors, make sure you attach the manual safety cable to the door's latch cable as shown. This is a necessary safety factor as well as a foolproof escape route for embarrassing moments—say, *when the battery goes dead!* The best source for these solenoid kits or needed components is your local auto accessory store. If they don't stock the items, try the national accessory supply houses that specialize in automotive extras. The small manual keylock push buttons used in the side trim can be bought at any hardware store.



*The above wiring diagram shows the complete circuit for wiring doors and deck lid. Wires can be easily traced by using the simple code found in the lower right hand corner.*

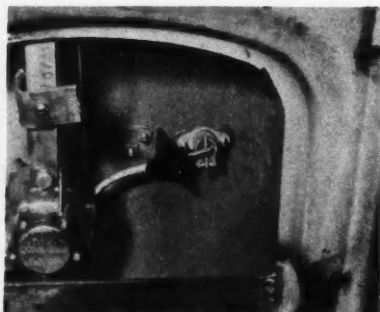
## INSTALLING KEYLOCK PUSH BUTTON IN SIDE TRIM:



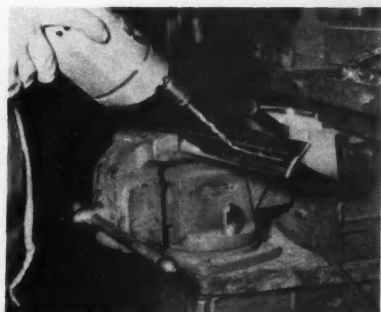
1. First determine position of the push button, then remove side trim and drill hole.



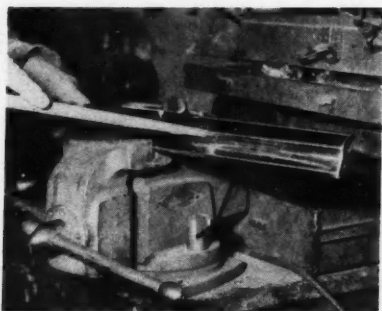
2. After hole has been drilled in door, install and secure small push button unit.



3. Strap with insulated bolt is secured next to unit. Wire goes to booster solenoid.



4. Determine where push button will protrude through exterior trim, then drill hole.

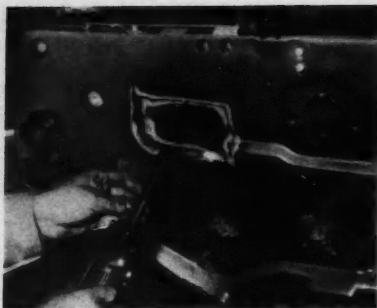


5. Drill side trim hole slightly undersize, finish off hole diameter with round file.

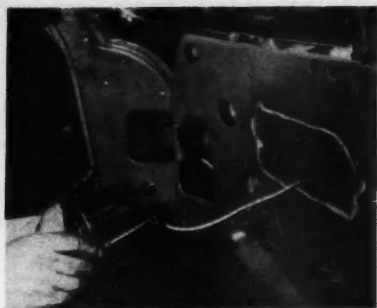


6. Push button is very obscure when hole just fits. Side trim is now reinstalled.

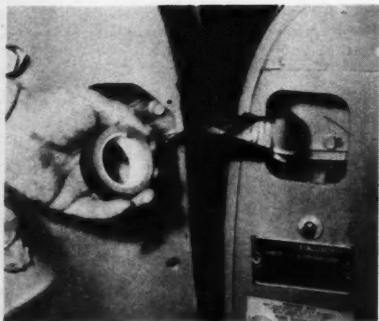
## INSTALLING MAIN DOOR SOLENOID:



1. Remove door upholstery and trim, then cut hole in door to accommodate solenoid.



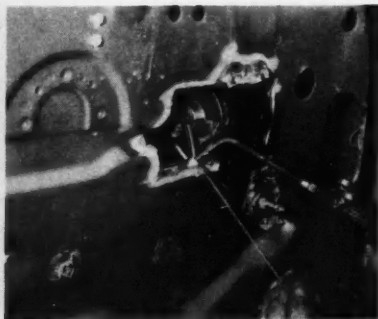
2. Before installing main solenoid, connect wire which goes to booster solenoid.



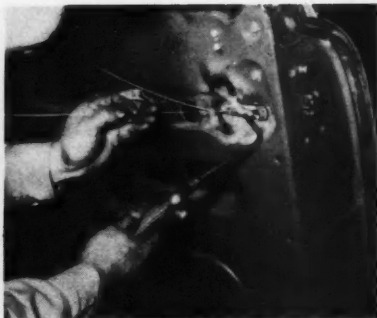
3. Wire is routed through the openings and along hinge. Allow slack, then tape up.



4. The main solenoid is now welded in place. It can be secured with bolts if desired.



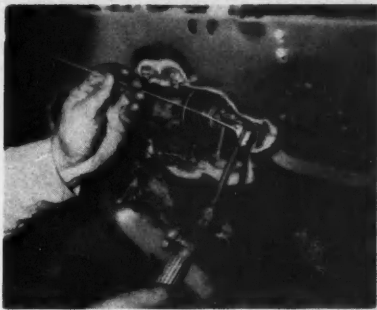
5. A small rod stopper is now welded in to prevent solenoid plunger from falling out.



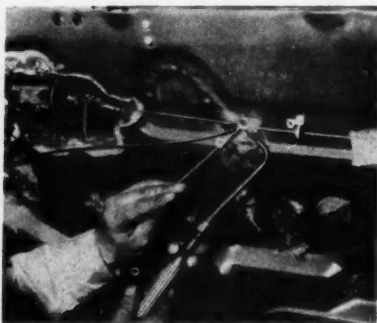
6. A strong cable is brazed to the door latch's mechanism to actuate the door latch.



7. A small rubber lined guide is installed on the door for cable to pass through.



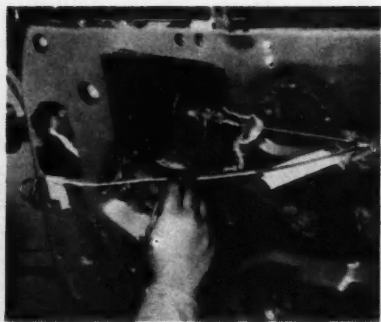
8. The other end of the door latch's cable is brazed to the end of solenoid's plunger.



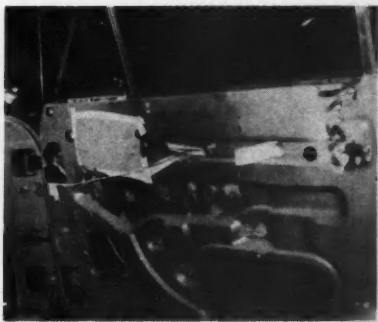
9. Just to the rear of the cable door guide splice on another short length of cable.



10. Braze ring to cable. This is safety cable which protrudes from under door panel.



11. All bare metal is now painted to prevent rust. Note position of safety cable.



12. Cardboard, attached with masking tape, is used to cover all holes cut into door.

## INSTALLING MAIN DECK LID SOLENOID:



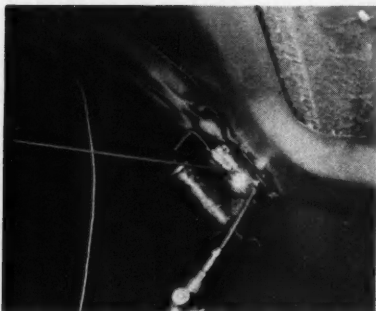
1. First remove the deck latch mechanism and braze cable onto latch's actuating arm.



2. Next, position the main solenoid up under the deck lid and drill holes for attaching.



3. Main solenoid can either be bolted to deck's center webbing or secured by brazing.



4. Round rod bent at L angle is brazed to solenoid to prevent plunger from falling out.



5. Latch mechanism is reinstalled and cable connected to solenoid. Note cable guide.

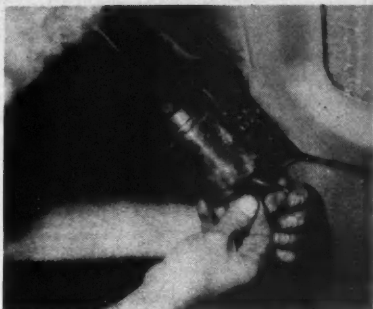


6. Since solenoid operates in upside down position, return spring is fixed to plunger.





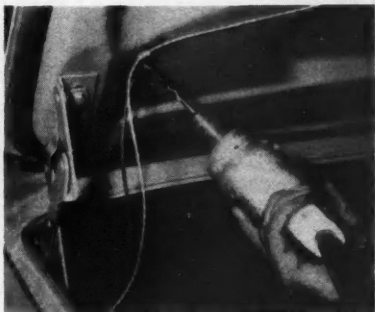
**7. Brazed area and bare metal is now painted thoroughly to prevent possibility of rust.**



**8. Solenoid wire is now connected. It goes to booster solenoid positioned under hood.**



**9. For neat job, small surplus guide loops are used to route wire over deck webbing.**



**10. Another guide loop is placed at the corner of deck to keep wire from dangling.**



**11. Route the booster wire down along the deck hinge and under the wheel well cover.**



**12. The main deck solenoid installation, when finished, should look like this.**

**CONTINUED ON PAGE 64**

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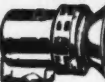
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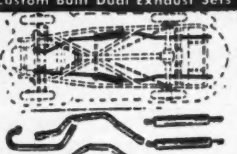
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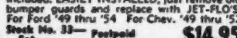
## New "Jet-Flo"

### BUMPER GUARDS

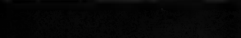
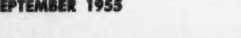
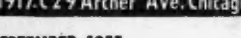
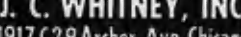
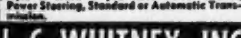
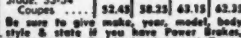
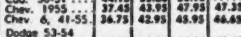
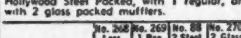
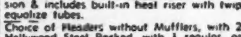
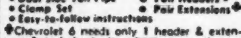
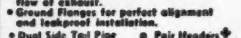
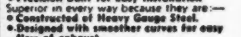
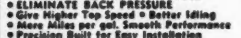
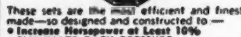
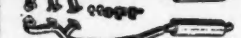


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Gives the Appearance of Bells on Single Exhaust Systems  
Complete bumper guards with adapter pipes included. EASILY INSTALLED, just remove old bumper guards and replace with JET-FLO's.  
For Ford '49 thru '54 For Chev. '49 thru '52  
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These sets are the most efficient and finest made—so designed and constructed to—  
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• Give Higher Top Speed • Better Idling  
• More Miles per gal. Smooth Performance  
• Precision Built for Easy Installation  
• Superior in every way because they are—  
• Constructed of Heavy Gauge Steel.  
• Designed with smoother curves for easy flow of exhaust.  
• Ground Flanges for perfect alignment and leakproof installation.  
• Dual Side Tail Pipe • Pair Headers • Clamp Set • Pair Extensions • Easy-to-follow instructions  
• Chevrolet 6 needs only 1 header & extension & includes built-in heat riser with two equalize tubes.  
Choice of Headers without Mufflers, with 2 Hollywood Steel Packed, with 1 regular, or with 2 glock packed mufflers.



## FIBRE GLASS PACKED

### RACKET



### BUSTER



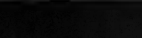
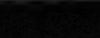
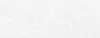
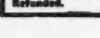
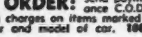
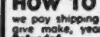
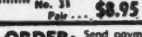
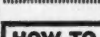
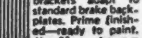
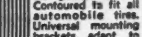
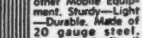
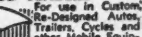
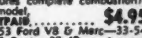
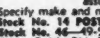
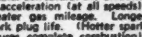
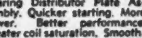
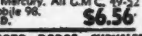
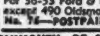
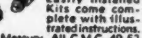
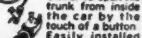
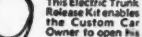
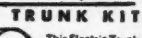
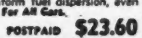
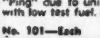
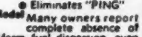
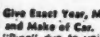
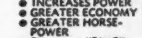
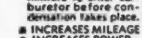
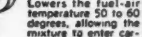
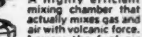
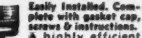
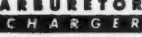
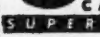
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### EXTENSION

Ideal for cars that have mufflers that are too loud, or too noisy. Also mellow loud noises. Eliminates 50% of all present exhaust noises. Scientifically tested and proven to work in all installations. 3" Diam., 10" Length. Eliminates Offensive Rackets. Packed with Fibreglass. Fits 1 1/2 to 2 1/2 in. tail pipes. State size wanted.  
No. 67 POSTPAID Each..... \$3.74

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Roll 1/2 in. wide, 40 ft. long.  
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FOR FORD AND MERCURY  
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• Solid metal—withstanding hard usage  
• Rich custom look  
• Replaces original equipment without alteration  
• Eliminate broken knobs—cattle-striped threads  
No. 115—Ford 40-53, Merc. 40-48  
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# "What's Your Problem?"

By Ray Brock

## CHOOSING AN AUTOMATIC TRANS

Dear Ray:

I have a 1952 Ford 6 with Ford-O-Matic. I am getting ready to install either a 1954 Oldsmobile or Buick Century engine.

Can I use the Ford-O-Matic and if so, should I beef it up? Otherwise, what would you recommend for a transmission?

Jim Stovall  
El Paso, Texas

*You would be beating your head against a wall if you tried to use a Ford-O-Matic transmission with either of the engines you have mentioned. The Ford-O-Matic could conceivably be "beefed up" to take the increased horsepower, but why bother? Both Hydra-Matic and Dyna-Flow (especially the '55 mod-*

*el) are much more positive and effective. Also, an involved adapting job is eliminated by using the transmission which is designed for the particular engine you choose to install.*

## LASALLE HORSEPOWER BOOM

Dear Ray:

I have a '37 LaSalle club coupe that I'm about to overhaul. The engine is a stock V8 and I would like to soup it up a little. I would like to know the cheapest way to get a worthwhile power gain with the least amount of money.

I had planned to mill the heads, install a  $\frac{1}{4}$  race cam, and put on dual carburetors. Would it be advisable to have the present cam ground or buy a  $\frac{1}{4}$  cam? Also, is there a dual carburetor manifold on the market that will fit the '37 block?

Richard E. Lewis  
Dayton 8, Ohio

*You would probably get a much healthier piece of machinery at a lower cost if you were to pick up a late Cad or Olds from a wrecking yard. Either of them would bolt right to your LaSalle transmission. With a little shopping around you should be able to pick up a*

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are the shox for you. Three easy adjustments give you a soft, normal or firm ride—in other words, a quick click and you have the type ride of your particular choice. Your dealer knows "AjustOmatic" and also "Gabriel", the greatest name in ride control. See him or write—

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complete engine in good condition for \$150 or \$200 which is a much better (and probably cheaper) idea than reworking a passé LaSalle.

#### A LITTLE HEAD WORK

Dear Ray:

I have a 1951 Olds Rocket engine on which I am shaving .090 off the heads. Could you please tell me approximately how much will have to be taken off the intake manifold in order for the ports to match up again?

Horace Barreca

Woodhaven 21, N. Y.

*You are taking a pretty healthy chunk off the heads and you might experience some detonation as well as thin spots in the head surface. Some Olds heads have enough meat to be shaved as much as .100 but .070 is generally considered ample. Because of the relatively flat angle on Olds manifold surfaces and the fact that the intake ports are side by side instead of one on top of the other, the usual practice is to not mill the manifold surfaces. In stock form, there is always a certain amount of misalignment anyway, so the popular practice is merely to match the manifold*

*passages to the head ports with a portable grinder. This is fairly simple and gives excellent results.*

#### FAINT-HEARTED CHEVY

Dear Ray:

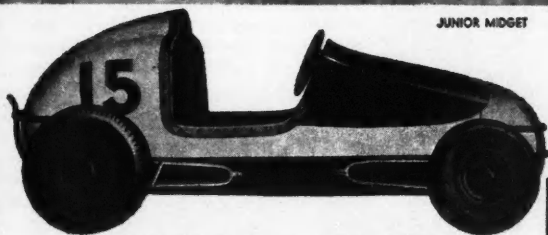
I wonder if it would be possible to get some information concerning an engine change for a '50 Chevy with Powerglide. Would a 270 GMC engine fit on the Powerglide transmission?

What I am interested in is a good reliable engine that will stand a day's driving at 65 or 70 mph out on the prairies with considerable gas economy.

Thank you,  
Arnold W. McKenzie  
St. Croix Falls, Wis.

*We could suggest the installation of the 270 GMC ahead of the Hydra-Matic as installed in the 1954 GMC pickup series. With a solid transmission hookup, Powerglide rear end gears should be good. All this is the expensive approach and we think the best bet would be the 1954 Powerglide with your engine built up as a conservative road job, as in the November '54 issue of CCM.*

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### COMET MANUFACTURING CO.

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## MAIL BAG CUSTOM

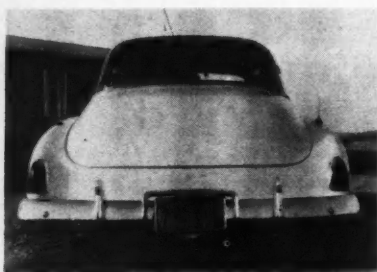
### Editor's Note:

This month we raise the curtain on a new bi-monthly feature called Mail Bag Custom. It's a one pager devoted to you, the reader, and your equipment. Every other month we will select a car, hot rod or custom, that we think would be informative to other readers from the standpoint of clever styling as well as appearance. All that is required is a good set of clear and legible black and white snapshots (no color) along with the data on what has been done to the car. If you plan to submit your car, possibly a few pointers from an article featured in the June '55 issue of CAR CRAFT, called "Hold It," would help you in the photography department. At any rate, for those of you who wish to see your cars in the magazine, the doors are wide open—so start 'em rolling!

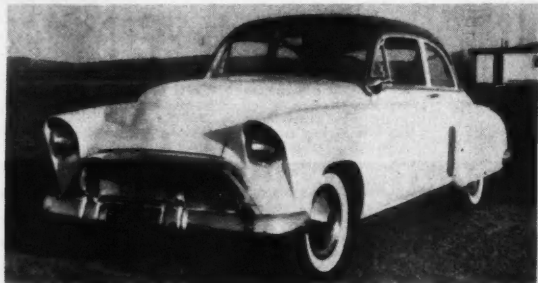


Pete used a '50 Olds top grille bar to frame his Chev's grille opening. The perforated facing was home-made from steel sheeting.

'51 Kaiser taillights were installed in place of stock lights. The license plate housing is from the front bumper of a '49 Chevy.



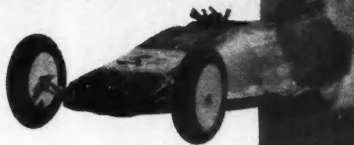
The fender extensions were hand formed from steel sheet metal. The air-scoops on the rear fenders are functional. All stock body trim has been removed.



THE FIRST CAR to make its debut in this new feature is a '49 Chevy two-door belonging to Pete Scadron, who hails from Easton, Pennsylvania. Scadron built the car in his spare time between college semesters. Pete says, "you might say my three scholastic R's stand for—Reading, Restyling and Rodding." The car took a period of two years' spare time to complete, and if you look real close it's fairly obvious that he either had a sneak preview of what the '55 Plymouths would look like, or he just plain beat the Chrysler Corporation's stylists to the punch.

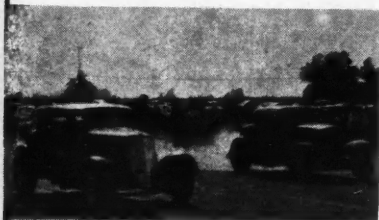


# **DON'T MISS** Hot Rodding's Main Event! **NATIONAL CHAMPIONSHIP** **DRAG** **RACES**



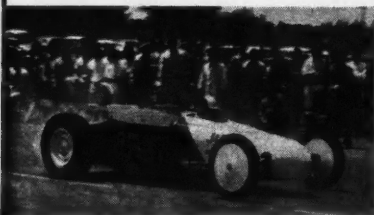
**Sept. 29 — Oct. 2, 1955**

## **GREAT BEND, KANSAS**



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—ATTEND HOT RODDING'S GREATEST  
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### **MORE THAN 65 TROPHIES**

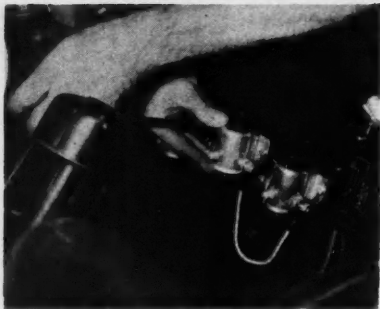
National Championship Award, Trophies for Winners in All 30 Classes, Trophies for National Records in All Classes, Plus Special Awards and Merchandise Prizes.

### **PROGRAM OF EVENTS**

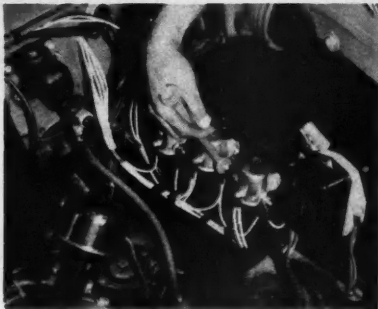
Thursday, Sept. 29—  
Registration and Qualifying Runs.  
Friday, Sept. 30—  
Registration and Qualifying Runs.  
Saturday, Oct. 1—  
Class Elimination Drag Races.  
Sunday, Oct. 2—  
Official National Record Runs.

For Official Entry Blank write now to  
**NATIONAL DRAGS, 5959 Hollywood**  
**Blvd., Los Angeles 28, California**





1. Three booster solenoids are secured to firewall. Connect up battery terminals.



2. Each solenoid's battery terminal is connected to the next 'til circuit is complete.



3. The "BAT" terminal lead of last solenoid is connected to hot side of regulator.



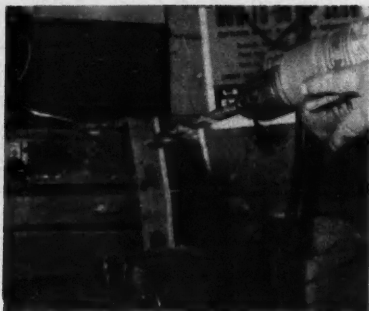
4. Dash and exterior button wires are connected to center pole (see wiring diagram).



5. Connect main solenoid wires to terminal opposite "bat" terminal, then tape wires.



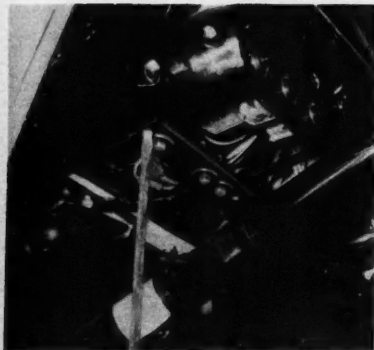
6. Small holes can be drilled into firewall for passing wires through to push buttons.



7. A small metal strap is used for push button installation up under the dashboard.



8. Drill holes so button units have snug, clip fit. Three buttons will be needed.



9. The metal strap containing push buttons is secured in an easy-to-reach dash position.

SEPTEMBER 1955

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As featured in June '55 Car Craft.

Complete Kit, Postpaid.....\$15.00

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'39 Ford or later Kits, less bracket, Postpaid.....\$12.50

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NEXT MONTH

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1 qt. is sufficient for most interiors. Specify plastic, or leather when ordering.

MODEEN PRODUCTS CO.

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## BENCH RACIN'

(Continued from page 4)

the throttles are closed. Also, the smallest vacuum leaks arising from faulty installation or from worn throttle shafts must be eliminated.

When the idle system is made to function properly, the rest is easy, and the main metering jets should then be checked for size. This is best done on a level stretch of road where the car can be held at a constant speed of 60 to 65 mph, but below 75 mph for at least two miles. In this way, only the main metering system will be operative, the speed being above the range of the idle system and below the point where the power valve begins to open. In doing this, "jockeying" the throttle must be avoided to keep the accelerator pump from camouflaging the results. After the two-mile run, the engine must be shut off "clean," the spark plugs removed and examined. If there is any evidence that the plugs are running hot (burned or discolored electrodes, burned or glassy-appearing insulators) then the mixture must be richened. On the other hand, if the plugs appear dark and sooty, the mixture is too rich. When the mixture is right for maximum power, the plug insulators should be in the tan to light brown range, but this may be a bit sloppy for town use, in which case the mixture may be leaned out until the insulators take on an even gray coloring.

Next, a couple of runs should be made on the same stretch at about 85 mph if possible (and legal) to check the size and operation of the power valve. The power valves in modern carburetors are vacuum operated and start to open at about seven inches of mercury or less. The valve is necessary to enrich the fuel/air mixture to prevent overheating of the combustion chamber and pre-ignition that would otherwise occur when the engine is under sustained heavy load. After these runs, the plugs should again be checked and if everything is right, they should appear normal. If there is any doubt, the power valve should be enlarged slightly.

If, at any time during the above process, there are any "flat spots," "hesitations" or other signs of erratic operation, these can be interpreted to mean that the mixture ratio is haywire, provided the ignition system is good

and the spark plugs are clean. It is quite difficult, in fact, sometimes impossible to accurately tell whether the "flat spots" are caused by a rich or lean condition. In this case, the best practice is to go richer first, and if the condition is aggravated, go leaner. If "flat spots" occur in the low and mid-range speeds, chances are they can be cured by enriching the idle mixture slightly.

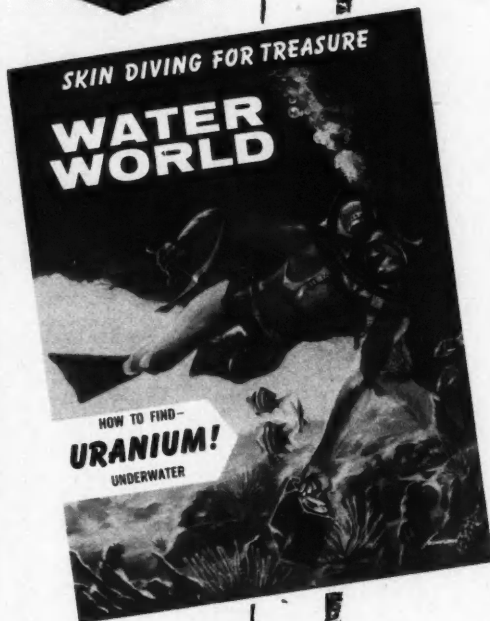
A stock accelerating pump jet usually suffices in most cases. The pump linkage should be adjusted so there is no "hesitation" or "loading up" when the throttle is opened.

Now is the time to find a good level stretch for checking standing start times over a given distance, say at least a quarter-mile or so. The distance can be staked out and several runs made in opposite directions with a stopwatch to establish an average. Most drag strips are not suitable for this unless the elapsed time method is used over the entire distance. A little care is necessary when these runs are made to make sure the variables such as shift points, wind conditions, etc., are as consistent as possible. This is the place to make corrections to the carburetion, ignition timing, etc. Records of elapsed times should be kept as a basis of comparison so we'll know that we're hopping the engine "up" instead of "down."

It's surprising how much can be learned by intelligent use of the above method. In fact, many excellent tune-up artists prefer this to a dyno because it is extremely difficult to exactly duplicate road conditions on a dyno without very elaborate and costly equipment. However, when this time and distance routine is used, it is imperative that the cardinal rule be strictly observed; change only one thing at a time between checks. If this is observed, much valuable information can be gained from any seldom-used stretch of road, which could be titled "Poor Man's Dyno Avenue."

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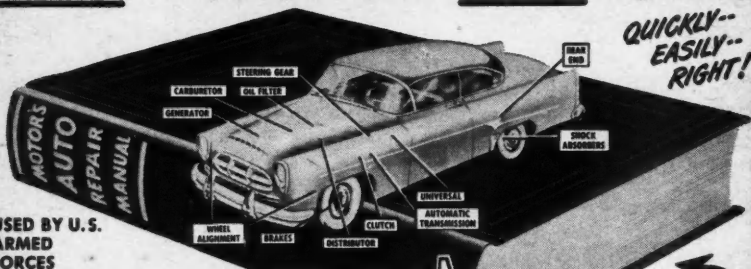
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